HELIOS
Observatoire des investissements en matière de santé
(HEaLth Investments ObServatory)

Rapport d'étude de faisabilité

Commandité par l'INCa et l'ITMO cancer

Novembre 2012

OST Observatoire des Sciences et des Techniques

Sommaire

Résumé
HELIOS est une étude de faisabilité destinée à documenter les résultats des investissements de recherche de l'INCa. Le cadre sous-jacent de l'étude se base sur l'idée que le financement de l'INCa influence la science, en agissant sur la création et la transmission des idées scientifiques au travers des réseaux scientifiques. Le projet a pour objectif à long terme de suivre les activités des réseaux pour mesurer les « produits » scientifiques, sociaux, économiques et professionnels générés en conséquence des interactions.

L'étude a examiné si les données de l'INCa relatives aux chercheurs peuvent être associées à d'autres données existantes concernant leurs activités et utilisées pour documenter les résultats des études financées par l'INCa. L'étude a identifié les points suivants.

- Les données de l'INCa sur les subventions peuvent être reconçues pour identifier ***qui*** est soutenu : les investigateurs principaux ainsi que les personnes appartenant aux équipes de recherche. Ces données peuvent être utilisées pour décrire les collaborations existantes au démarrage des projets.
- Les données de l'INCa comportent suffisamment d'informations textuelles pour décrire ***quelle*** recherche est en cours de réalisation, en résumant les termes utilisés dans les demandes de subventions et les publications. Les informations textuelles peuvent être utilisées pour générer des domaines thématiques de recherche et apporter une autre idée sur le type de recherche en cours de réalisation. En outre, il est possible d'effectuer une comparaison avec les mêmes domaines thématiques d' autres agences fédérales telles que le NIH.
- Les liens entre les chercheurs financés par l'INCa et les chercheurs en France et dans d'autres pays, notamment dans le secteur privé, peuvent être établis pour décrire ***avec qui*** la recherche est effectuée, à savoir les réseaux scientifiques de collaboration.
- Les données peuvent également être utilisées pour décrire ***où*** est effectuée la recherche financée par l'INCa, que ce soit par l'institution de recherche ou par les institutions de collaboration.

Les données sont également potentiellement assez robustes (données de géolocalisation et données de texte complet) pour être visualisées au moyen d'approches géographiques et thématiques de l'information.

Enfin, comme les données de financement peuvent être reliées aux individus des équipes participant aux projets, et à leur production et collaboration scientifique ultérieure, les données constituent la base sur laquelle il est possible d'élaborer de nouveaux indicateurs. Parmi les exemples d'indicateurs potentiels, on peut citer le nombre de collaborateurs internes et externes au sein de chaque projet, le nombre de collaborateurs internes et externes des chercheurs financés par l'INCa et travaillant dans le même domaine de recherche, le temps nécessaire aux collaborations pour qu'elles passent de l'idée (démarrage du projet) à sa diffusion, le nombre et la proportion de chercheurs financés par l'INCa travaillant sur un domaine thématique donné au moment du financement, le nombre et la proportion de chercheurs financés par l'INCa pendant les périodes ultérieures.

1. Contexte et objectif du projet

L'Observatoire Helios a pour objectif global d'élaborer un rapport, afin que l'INCa, l'Institut Cancer de l'alliance Aviesan et le ministère de la Santé puissent décrire leurs investissements en matière de financement de la recherche sur le cancer, dans le contexte de l'évolution internationale des agences de financement pendant la même période, et de donner un aperçu initial des résultats. Le rapport est également destiné à informer l'INCa et l'Institut Cancer de l'alliance Aviesan sur ce qui est réalisable avec les données actuellement disponibles.

La phase de faisabilité de l'étude couvre le financement de la recherche par l'INCa pendant la période 2008-2009. À long terme, les investissements de recherche effectués entre 2007 et 2013 seront inclus dans l'étude, et aboutiront ainsi à un rapport élargi sur le financement de la recherche par l'INCa et l'institut Cancer de l'alliance Aviesan/Inserm.

L'Observatoire Helios constitue la première tentative pour identifier les produits de la recherche sur le cancer, et il informera en conséquence les organismes financeurs et l'Etat sur l'impact des efforts réalisés au cours des Plans cancer successifs (2003-2007 et 2009-2013). Pendant ces deux Plans présidentiels, des investissements sans précédents ont été engagés pour soutenir la structuration et les effectifs de recherche et les programmes de recherche dans le domaine du cancer. L'INCa agit en tant que coordinateur national de ces efforts.

En outre, l'Observatoire Helios a pour objectif de mieux appréhender les résultats du financement de la recherche et le mécanisme par lequel ceux-ci peuvent se produire. Un premier axe d'étude pourrait inclure comment le financement peut contribuer à la création des consortiums, des synergies pour des financements consécutifs et des collaborations internationales durables.

Cet Observatoire agit en tant que preuve du concept pour élaborer des outils du même type, afin de mesurer et visualiser les investissements effectués en France au cours des différents plans de santé et donc pour fournir des éléments tangibles sur l'impact des financements engagés. L'Observatoire fournit de nouveaux indicateurs sur les relations avec le secteur privé, la collaboration, les liens avec la recherche internationale et la portée géographique de l'INCa ainsi que le financement de l'Institut Cancer de l'alliance Aviesan/Inserm.

2. Théorie HELIOS du changement

La théorie centrale du changement sur laquelle s'appuie HELIOS est que la science est faite par les scientifiques, et par conséquent, les mesures doivent se baser sur la description des interactions humaines et sur les résultats de ces interactions, plutôt que se contenter de compter des brevets et des publications. Ian Foster a fourni un cadre d'organisation sensé, illustré dans la figure 1. Celui-ci identifie les individus (ou la communauté scientifique composée des réseaux de scientifiques) comme étant le « moteur » qui génère les idées scientifiques. La théorie du changement considère qu'il existe un lien entre le financement et la manière par laquelle ces réseaux s'assemblent. Ensuite, il existe un lien entre les réseaux scientifiques et la manière par laquelle ces idées sont créées et transmises – et donc génèrent des « produits » scientifiques, sociaux, économiques et professionnels. Ces liens de causalité sont souvent si longs et si fins que relier les résultats aux subventions individuelles, plutôt qu'aux réseaux scientifiques soutenus par ces subventions a peu de chances d'aboutir pleinement.

L'objectif à long terme d'HELIOS est de permettre aux décisionnaires politiques de mieux comprendre le processus scientifique, et de pouvoir ainsi mieux le soutenir.

Cette approche est fondamentalement différente de la bibliométrie, qui en est venue à dominer une grande partie de la mesure scientifique. Elle a une grande valeur dans de nombreux contextes, et contribue probablement sensiblement à notre compréhension du corpus des publications. Toutefois, son utilité pour décrire la performance scientifique est limitée – en effet, elle n'a pas été conçue pour décrire l'entreprise scientifique. La nouvelle approche proposée par l'observatoire Helios complète l'analyse bibliométrique par une nouvelle réflexion sur le processus. Un article récent a résumé une décennie de travaux et a affirmé : « Les évaluateurs s'appuient souvent sur des raccourcis numériques provenant des domaines étroitement liés (Hood et Wilson, 2001) de la bibliométrie et de la scientométrie – en particulier l'indice d'impact des journaux de Thompson Scientific. Toutefois, malgré la popularité de cette mesure, elle est lente (Brody et Harnad, 2005), étroite (Anderson, 2009), mystérieure et non reproductible (Rosner *et al.*, 2007), ouverte au jeu (Falagas et Alexiou, 2008) et basée sur les revues, et non pas sur les articles qu'elles contiennent. » (Priem & Hemminger, 2010)

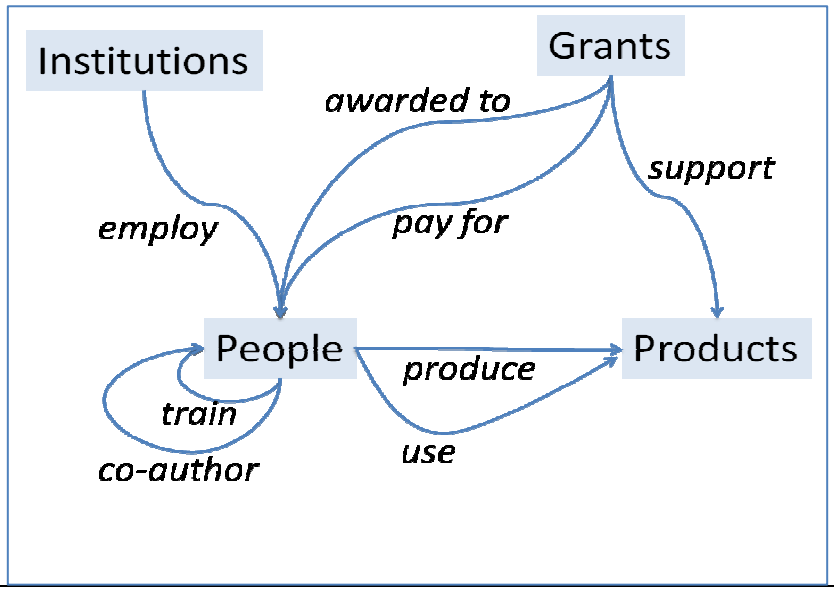

Figure 1: une vision centrée sur l'individu pour appréhender les résultats du financement de la science
Les individus (ou la communauté scientifique composée des réseaux de scientifiques) sont le « moteur » qui génère les idées scientifiques. La théorie du changement considère qu'il existe un lien entre le financement et la manière par laquelle ces réseaux s'assemblent. Ensuite, il existe un lien entre les réseaux scientifiques et la manière par laquelle ces idées sont créées et transmises – et donc génèrent des « produits » scientifiques, sociaux, économiques et professionnels

3. Données

L'infrastructure des données, qui reflète ce cadre conceptuel, est décrite par le schéma des données de l'INCa de la figure 2. Nous allons décrire les données de l'INCa de manière plus détaillée dans cette section. Comme le cadre est centré sur les chercheurs financés par l'INCa, nous commençons par décrire le nombre de subventions et le nombre de chercheurs. Nous passons ensuite à la transmission des informations sur les publications et les brevets produits par ces chercheurs. Comme il s'agit d'une étude de faisabilité, nous avons travaillé sur les données disponibles existantes. En soi, les données sur les chercheurs financés correspondaient à la période de 2008 à 2009 alors que les données sur les publications et les brevets se rapportaient aux années 1999 à 2009. De ce fait, le rapport décrit uniquement la capacité à relier les chercheurs à leurs activités. En raison des différences temporelles, il est clair qu'aucune conclusion de causalité ne doit être établie.

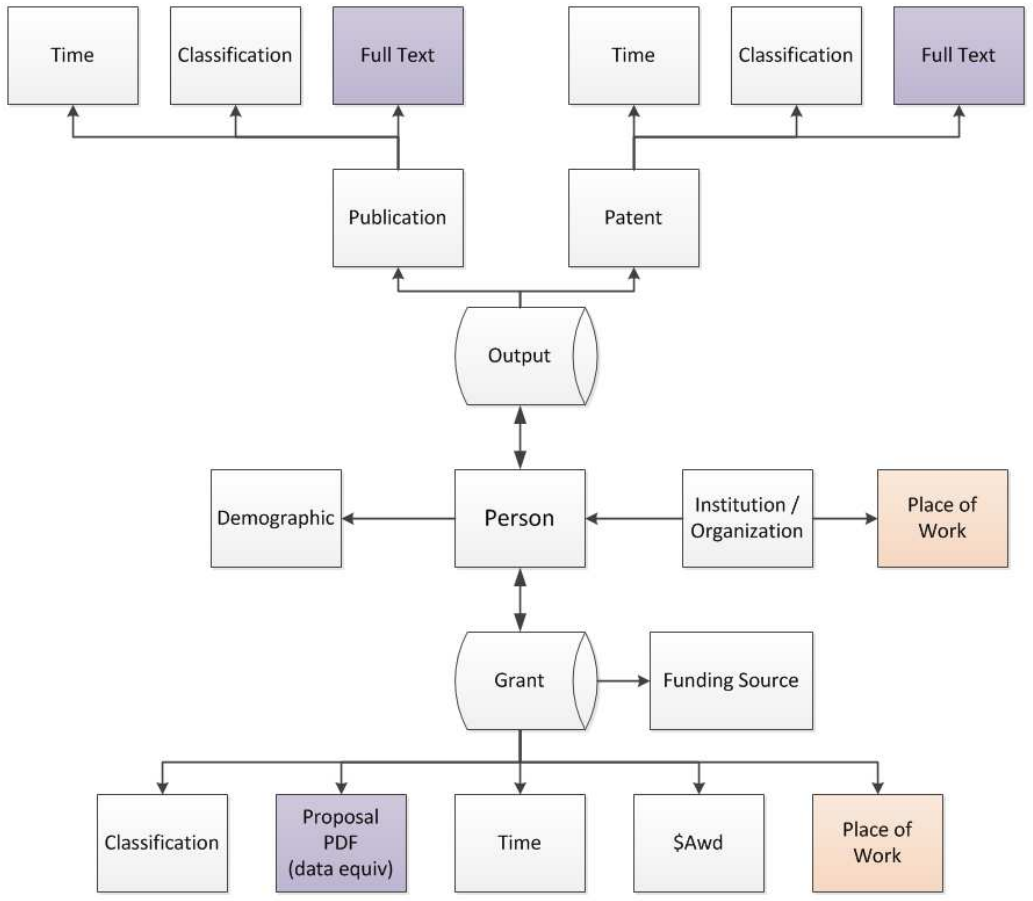

Figure 2: le schéma Helios centré sur l'individu
Le schéma est centré sur les chercheurs financés par l'INCa, les investissements sont décrits par l'information contenue dans les demandes de subventions, les résultats scientifiques sont décrits par les publications et le brevets

Subventions et bénéficiaires

L'INCa est à l'heure actuelle en train de créer une base de données complète de toutes ses subventions. L'équipe HELIOS a travaillé sur les données des années 2008 et 2009. Des données supplémentaires sont actuellement ajoutées à la base de données. Le tableau 1 résume les données portant sur le nombre de subventions, de chercheurs et d'institutions (laboratoires de recherche associés) soutenus par les subventions de l'INCa. Le montant des subventions est également indiqué en euros.

Tableau 1: les subventions accordées aux projets 2008-2009				
Date début financement	Nombre de projets	Montant (Euros)	Chercheurs uniques	Institutions uniques
2008Q1	54	17,656,000	100	51
2008Q2	3	151,000	3	3
2008Q3	2	58,000	2	2
2008Q4	68	23,408,203	104	68
2009Q1	21	6,245,407	34	32
2009Q2	50	17,035,000	62	33
2009Q3	42	9,924,488	65	37
2009Q4	55	20,955,669	75	52

Tableau 1: les subventions accordées aux projets 2008-2009
Les subventions incluent celles accordées par la DGOS pour le programme hopsitalier de recherche Clinique (PHRC) et le financement accordé par l'INCa (voir les details des programmes finances dans l'annexe) ; les montants couvrent des périodes allant de 3 à 4 ans. Les institutions uniques sont entendues comme les laboratoires des chercheurs impliqués dans les projets.

Au fur et à mesure que ces données seront constituées, il sera possible d'utiliser les informations sur les chercheurs individuels pour créer des liens avec leurs activités *ultérieures* (décrites dans la figure 1). Au départ, ces informations concerneront leurs publications et leurs brevets, mais elles comprendront également les collaborations entre chercheurs pour ces activités, de même que les collaborations avec des chercheurs issus d'autres secteurs, en particulier le secteur privé.

Aux fins de ce rapport toutefois, nous décrivons uniquement les activités et les liens des chercheurs financés par l'INCa ***avant ou au moment*** de la subvention. Ce rapport établit donc la faisabilité de constituer les liens et d'analyser les activités des chercheurs de l'INCa. Il n'apporte pas de preuves de corrélation ou de causalité entre le financement de l'INCa et les activités des chercheurs.

L'Institut cancer de l'alliance Aviesan a fourni un fichier destiné à inclure tous les chercheurs dans le domaine du cancer, avec leur nom et leur numéro d'identification de l'INCa. L'INCa a fourni un fichier de comparaison avec tous les chercheurs ayant bénéficié de toutes les subventions pendant la même période (chaque subvention touche plusieurs chercheurs). Cependant, le fichier de l'Institut cancer de l'alliance Aviesan était incomplet. Parmi les 316 subventions, l'Institut Cancer de l'alliance Aviesan répertorie seulement 95 chercheurs financés dans son fichier. Ceci suggère que le répertoire actuel des chercheurs peut être amélioré en utilisant les données existantes.

Données sur les brevets et les publications

Les données de publication sont issues d'une étude bibliométrique de la production scientifique dans le domaine du cancer sur la période 1999-2009[1]. La base de données source était le Web of Science® géré par Thomson Reuters, une base de données bibliographique sélective de plus de 11 000 revues dont une grande partie des meilleures revues internationales.

Les publications scientifiques relatives à la recherche sur le cancer ont été identifiées par une analyse statistique des mots contenus dans le titre et le résumé des articles cités dans le Web of Science® et validées lors d'un examen par des experts. L'annexe comporte les détails et au final, près de 570 000 articles de recherche sur le cancer publiés dans le monde entier ont été identifiés pour la période 1999-2009.

Les données sur les brevets sont issues d'une étude bibliométrique de la technologie dans le domaine du cancer sur la période 1999-2009[2]. La base de données source était la base Patstat de l'Office européen des brevets (OEB). Les soumissions de brevets auprès de l'OEB et de l'Organisation mondiale de la propriété intellectuelle (OMPI), ainsi que les brevets accordés par le bureau américain des brevets et de la technologie (USPTO, United States Patent and Technology Office) sur le cancer publiés entre 1999 et 2009 ont été identifiés par un filtre textuel de recherche dans le titre de l'avis de brevet, le résumé de l'invention, sa description et ses revendications. Le corpus de brevets constitué des brevets dont le seul ou le principal domaine d'application est le cancer a été validé lors d'un examen par des experts. Voir l'annexe qui fournit les détails. Au final, plus de 66 000 demandes de brevet auprès de l'OEB ou de l'OMPI ou brevets accordés par l'USPTO sur le cancer ont été identifiés pour la période 1999-2009.

Les activités de publication et de dépôt de brevet par les chercheurs financés par l'INCa ont été déterminées en associant par une approche de type préliminaire les noms des bénéficiaires de l'INCa aux noms des chercheurs dans les bases de données de publication et de brevet sur le cancer. Une vérification manuelle sur un échantillonnage de publications et de brevets a confirmé que la levée des ambiguïtés à la suite de cette opération était suffisamment limitée pour ne pas justifier une attention particulière aux fins de l'étude de faisabilité actuelle. Des techniques plus complètes d'association d'individus provenant de

[1] « Indicateurs bibliométriques de la recherche dans le domaine du cancer. Volet 1 – publications scientifiques », novembre 2011. Cette étude a été menée par l'Observatoire des Sciences et des Techniques (OST) au nom de l'INCa et de l'Inserm. L'étude a été réalisée en collaboration avec Gérard Chevalier (INCa), Corinne Sebastiani (Inserm) et Valérie Thibaudeau (INCa) et s'appuyait sur un panel d'experts spécialisés dans le domaine : Ula Hibner (CNRS) et Catherine Cavard (CNRS), Vincent Levy (hôpital Avicenne, université Paris 13) et Khaled Meflah (CLCC François Baclesse).

[2] « Indicateurs bibliométriques de la recherche dans le domaine du cancer. Volet II – brevets », janvier 2012. Cette étude a été menée par l'OST au nom de l'INCa et de l'Inserm. L'étude a été réalisée en collaboration avec Gérard Chevalier (INCa), Corinne Sebastiani (Inserm), Sophie Gomez (ITMO cancer) et Valérie Thibaudeau (INCa) et avec les conseils de Matthieu Collin (Inserm transfert) et Romain Val (INCa).

bases de données différentes sont en cours de développement par l'OST[3], en particulier dans le cadre du réseau européen *NameGame*.

4. Description des portefeuilles de subvention à l'aide de la modélisation thématique

Une des principales questions de l'étude de faisabilité était de démontrer la valeur de la description de ***quelle*** recherche avait été financée et de la placer dans un contexte international, en particulier en ce qui concerne le financement par le NIH. Outre les domaines thématiques de la classification CSO, nous avons utilisé de nouvelles techniques de calcul pour décrire le contenu scientifique à l'origine du financement des équipes scientifiques, en examinant le texte des documents de la proposition et le type de recherche actuellement effectuée selon les résumés des publications.

Cette technique, connue sous le terme de **modélisation thématique**, fournit un cadre puissant et souple pour représenter, résumer et analyser le contenu de grands ensembles de documents, et elle peut être utilisée pour décrire les thèmes de recherche – et donc décrire le type de recherche effectuée.

Les thèmes constituent une représentation simplifiée des documents scientifiques. Les thèmes de recherche sont définis par la proposition de recherche, et non pas par la génération manuelle de taxonomies ou mots-clés (Blei, Ng, & Jordan, 2003 ; Newman, Hagedorn, Chemudugunta & Smyth, 2007). Cette approche a été appliquée aux subventions attribuées par le NIH et au corpus de documents de l'INCa. L'approche de la modélisation thématique a été mise en œuvre suite à un projet de deux ans entrepris au nom de deux comités consultatifs de la NSF – le comité d'informatique, de sciences de l'information et d'ingénierie (CISE, Computer and Information Science and Engineering) et le comité des sciences sociales, comportementales et économiques (SBE, Social, Behavioral and Economic Sciences)[4]. Le modèle thématique est un modèle probabiliste qui apprend automatiquement un jeu de thèmes (catégories) décrivant un ensemble de documents en fonction des mots contenus dans ces documents. On considère que chaque document est composé d'un petit nombre de thèmes, chacun étant dominé par seulement une fraction de tous les mots possibles. Le choix de la granularité des thèmes dépend des besoins de l'utilisateur.

Comme le modèle thématique est basé sur les probabilités, de nombreuses valeurs peuvent être exprimées sous forme de probabilités ou de pourcentages. Par exemple, nous pouvons indiquer la probabilité d'un thème donné dans un document, et la somme de ces probabilités est égale à 1 (ou l'addition des pourcentages donne 100 %). De la même manière, pour estimer les thèmes par organe ou type de cancer ou les thèmes par catégorie

[3] « Who's who in Patents. A Bayesian approach », Nicolas CARAYOL, Lorenzo CASSI Documents de travail du GREThA, n° 2009-07 http://ideas.repec.org/p/grt/wpegrt/2009-07.html.

[4] Découvertes dans un portefeuille de recherche. Outils pour structurer, analyser, visualiser et échanger avec les portefeuilles de propositions et d'attributions, novembre 2010. Rapport final sur les recommandations des sous-comités CISE et SBE de la National Science Foundation (rapport joint dans l'annexe).

de la classification CSO, la somme de ces pourcentages doit également être égale à 100 %. Comme le modèle thématique du NIH comporte environ 700 thèmes, chacun représente (en moyenne) environ 0,14 %. Par conséquent, les valeurs supérieures à 1 % sont hautement significatives, même si elles semblent relativement faibles.

Dans cette étude de faisabilité, nous avons utilisé un modèle thématique qui a été testé sur tous les résumés du NIH (données publiques). Le NCI (National Cancer Institute, Institut du cancer américain) représente environ 20 % du NIH et donc un peu plus de 100 thèmes parmi les 700 du NIH. Les résultats de l'application de ce modèle aux 316 subventions de l'INCa peuvent être examinés au niveau de la subvention
http://www.ics.uci.edu/~newman/inca/topicsindoc.html.

Deux précisions doivent être apportées :
D'abord, chaque subvention comporte plusieurs thèmes, ce qui reflète la nature à plusieurs facettes de la recherche scientifique.

Ensuite, comme le modèle thématique est basé sur les probabilités, de nombreuses valeurs peuvent être exprimées sous forme de probabilités ou de pourcentages. Par exemple, nous pouvons indiquer la probabilité d'un thème donné dans un document, et la somme de ces probabilités est égale à 1 (ou l'addition des pourcentages donne 100 %). De la même manière, pour estimer les thèmes par type de cancer considéré ou les thèmes selon la classification Common Scientific Outline (CSO), la somme de ces pourcentages atteint également 100 %. Les valeurs supérieures à 0,14 % ne relèvent pas du hasard, et donc les valeurs supérieures à 1 % sont hautement significatives, même si elles semblent relativement faibles.

La liste complète et le classement relatif des thèmes sont indiqués dans l'annexe 4. La figure 3 présente une vue d'ensemble graphique des dix premiers domaines thématiques financés par l'INCa.

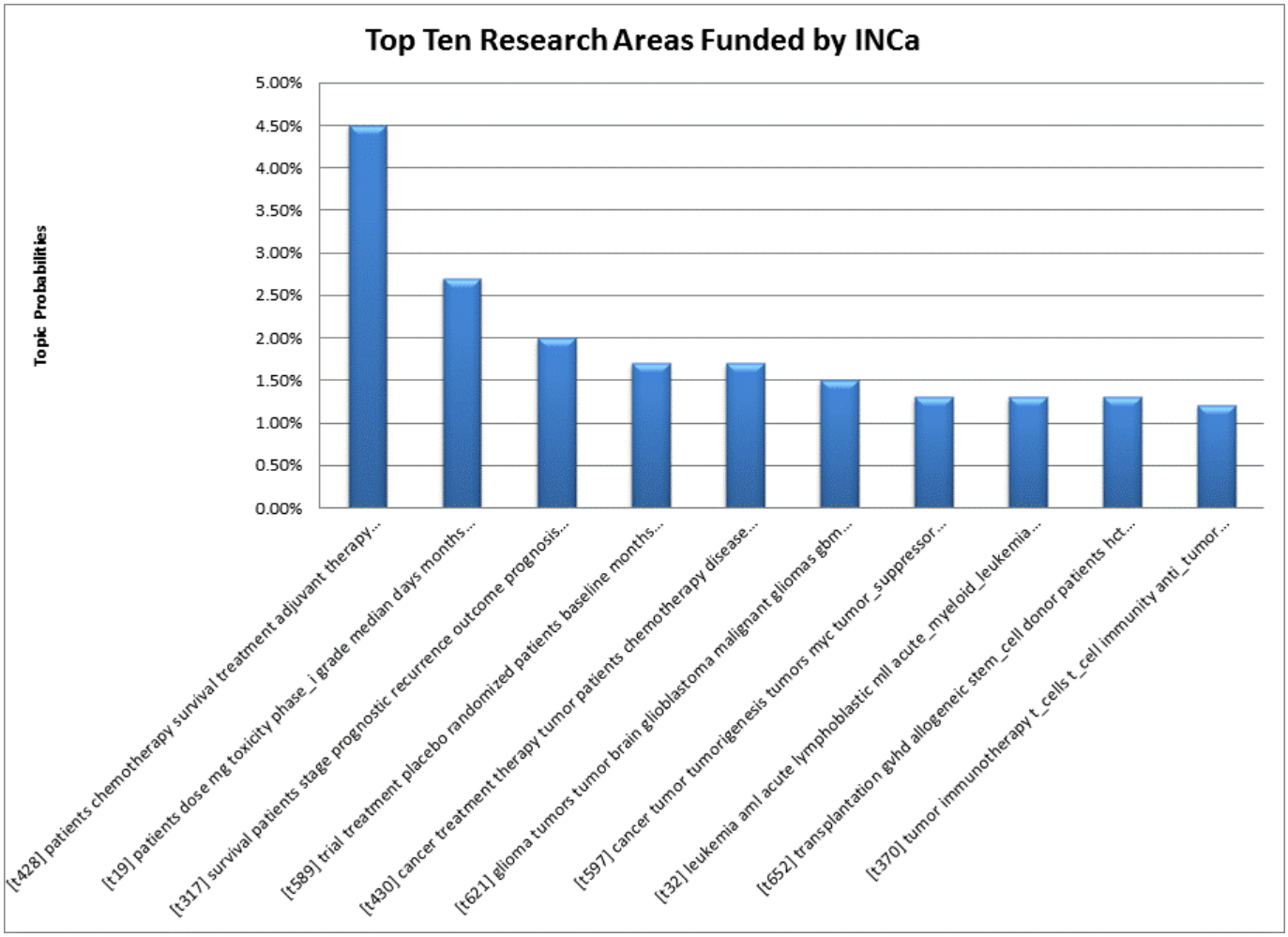

Figure 3: les 10 premiers thèmes financés par l'INCa et la DGOS
En utilisant la modélisation thématique, la probabilité d'un theme donné sur les subventions de l'INCa et la DGOS peut être exprimée en pourcentage. Chaque subvention couvre plusieurs thèmes reflétant la nature multifacette de la recherche scientifique. A partir des 700 thèmes existant dans la modélisation thématique du NIH, chaque theme représente environ 0,14%; toute valeur supérieure à 0,14% ne relève pas du hasard et toute valeur supérieure à1ù est ainsi hautement significative.

Les trois sections suivantes comparent les résultats de l'approche de modélisation thématique des données de l'INCa avec les types de cancer et les codes de catégorie CSO, ainsi que les subventions comparables du NIH. La liste des pourcentages présentés en marge d'un type de cancer donné, ou d'une catégorie CSO indique la probabilité de ce thème pour ce type de cancer ou cette catégorie CSO. Il est utile de noter que les thèmes ont été générés uniquement par des techniques d'apprentissage machine. Comme les algorithmes sont de type bayésien, il est toutefois possible d'inclure des informations supplémentaires. Les itérations ultérieures de l'algorithme devraient inclure les données de catégories CSO et de types de cancer, ainsi qu'une contribution humaine.

I. Association entre les domaines thématiques et le type de cancer

Le tableau 2 présente les domaines thématiques les plus fréquents pour les propositions classées comme abordant les cancers sur des sites particuliers. L'annexe IV détaille davantage chaque proposition spécifique.

Tableau 2: Relation entre les thèmes et les localisations de cancer

Localisation de cancer	Premier thème	Second Thème
0. Adrenocortical Cancer	[t203] steroid adrenal pcos steroids star dhea sf1 steroidogenic syndrome polycystic	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
2. Not Site-Specific Cancer	[t370] tumor immunotherapy t_cells t_cell immunity anti_tumor antitumor cancer antigen patients	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
3. Bladder Cancer	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage	[t582] release secretion exocytosis fusion snare secretory vesicles vesicle granules granule
4. Bone Cancer	[t621] glioma tumors tumor brain blioblastoma malignant gliomas gbm sarcoma survival	[t202] stem_cells regeneration cells stem_cell mesenchymal repair mscs msc bone_marrow tissue
6. Brain Tumor	[t621] glioma tumors tumor brain gliobastoma malignant gliomas gbm sarcoma survival	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
7. Breast Cancer	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage	[t686] cancer breast cancer_risk women cancers cancer_patients cancer_survivors treatment diagnosis diagnosed
9. Cervical Cancer	[t577] screening colorectal_cancer cancer_screening screen screened primary_care crc_screening tests preventive colonoscopy	[t278] hpv head_and_neck human cervical papillomavirus cervical_cancer hnscc hpv16 e6 squamous_cell
12. Esophageal/Oesophageal Cancer	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage	[t410] surgery surgical patients postoperative undergoing bypass resetion complications outcomes preoperative
13. Eye Cancer	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage	[t23] tumor tumors tumor_growth mice tumor_cells treatment xenografts therapy xenograft cancer
21. Head and Neck Cancer	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage	[t278] hpv head_and_neck human cervical papillomavirus cervical_cancer hnscc hpv16 e6 squamous_cell
23. Liver Cancer	[t663] hcc driving hepatocellular_carcinoma ablation drivers liver_cancer rf liver driver aflatoxin	[t217] liver hepatic hepatocytes hepatocyte liver_injury liver_disease livers nash nafld nonalcoholic
24. Hodgkin's Disease	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage	[t32] leukemia aml acute lymphoblastic mll actue_myeloid_leukemia leukemic pml leukemias patients
25. Kidney Disease	[t317] survival patients stage prognostic recurrence outcome prognosis disease poor status	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancer therapies
26. Laryngeal Cancer	[t428] patients chemotherapy survival	[t201] ct volume

	treatment adjuvant therapy treated median months stage	computed_tomography scans chest scan volumes mm nodules imaging
27. Leukemia/Leukaemia	[t32] leukemia aml actue lympthoblastic mll actue_myeloid_leukemia leukemic pml leukemias patients	[t652] transplantation gvhd allogeneic stem_cell donor patients hct disease transplant graft_versus_host
28. Lung Cancer	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage	[t444] lung_cancer lung nsclc non_small_cell adenocarcinoma cancers lung_tumors cancer a549 tumor
29. Melanoma	[t445] melanoma tumor melanomas melanocytes tumours metastatic cpg odn cells nis	[t19] patients dose mg toxicity phase_i grade median days months treatment
30. Myeloma	[t585] mm multiple_myeloma hgf myeloma surviving bortezomib cmet hepatocyte_growth_factor thalidomide patients	[t433] patients patient clinical diagnosis conclusions disease background diagnosed treated age
32. Neuroblastoma	[t16] metastasis invasion tumor meastatic progression cancer cells tumor_cells invasive tumor_cell	[t350] lymphoma b_cell cll nhl lymphomas leukemia non_hodgkin rituximab malignancies patients
33. Nervous System	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
35. Non-Hodgkin's Lymphoma	[t350] lymphoma b_cell cll nhl lymphomas leukemia non_hodgkin rituximab malignancies patients	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
36. Oral Cavity and Lip Cancer	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage	[t410] surgery surgical patients postoperative undergoing bypass resection complications outcomes preoperative
37. Pancreatic Cancer	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
42. Prostate Cancer	[t342] prostate cancer psa antigen prostate_specific prostatic prostatectomy radical biopsy gleason	[t660] prostate cancer psa cancer_cells lncap androgen progression human pc prostatic
48. Sarcoma, Soft Tissue	[t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival	[t19] patients dose mg toxicity phase_i grade median days months treatment
50. Small Intestine Cancer	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
51. Stomach Cancer	[t152] imatinib bcr_abl cml kit im stone chronic oxalate patients tyrosine_kinase	[t437] risk risk_factors cohort prospective high_risk cases follow_up collected controls population
52. Testicular Cancer	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage	[t19] patients dose mg toxicity phase_i grade median days months treatment
54. Thyroid Cancer	[t442] thyroid fine tip thyroid_cancer ret tuning ptc needle ao aspiration	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
61. Pharyngeal Cancer	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage	[t278] hpv head_and_neck human cervical papillomavirus cervical_cancer hnscc hpv16 e6 squamous_cell
64. Colon and Rectal Cancer	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage	[t447] colorectal_cancer colon_cancer colon crc colorectal apc colonic adenomas polyps

		adenoma
66. Ovarian Cancer	[t370] tumor immunotherapy t_cells t_cell immunity anti_tumor antitumor cancer antigen patients	[t269] treg_cells treg cd4 foxp3 cd25 cells tregs il2 t_cells t_cell
67. Blood Cancer	[t652] transplantation gvhd allogeneic stem_cell donor patients hct disease transplant graft_versus_host	[t612] bone_marrow cells hsc hematopoietic bm stem_cell hscs hematopoietic_stem_cells marrow transplantation
103. Anal Cancer	[t278] hpv head_and_neck human cervical papillomavirus cervical_cancer hnscc hpv16 e6 squamous_cell	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies

Talbeau 2. Relation entre les thèmes et les localisations de cancer
Les subventions de l'INCa sont associées à un ou plusieurs types de cancer (les types de cancer sont attribués manuellement par le personnel de l'INCa). Les deux premiers thèmes associés aux types de cancer décrivent de manière détaillée le type de recherche actuellement financée pour des types spécifiques de cancer.

II. Association entre les domaines thématiques et les catégories CSO

Le tableau 3 présente les domaines thématiques les plus fréquents pour les propositions classées selon les classifications CSO. L'annexe IV détaille davantage chaque proposition spécifique.

Tableau 3: les relations entre les thèmes et les catégories CSO

Categories CSO	Premier thème	Second thème
1.1 Normal Functioning	[t32] leukemia aml acute lymphoblastic mll acute_myeloid_leukemia leukemic pml leukemias patients	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
1.2 Cancer Initiation: Alterations in Chromosomes	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular	[t136] dna repair dna_repair dna_damage damage excision_repair ber lesions cells ner
1.3 Cancer Initiation: Oncogenes and Tumor Suppressor Genes	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular	[t32] leukemia aml actue lymphoblastic mll actue_myeloid_leukemia leukemic pml leukemias patients
1.4 Cancer Progression and Metastasis	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancer therapies	[t370] tumor immunotherapy t_cells t_cell immunity anti_tumor antitumor cancer antigen patients
1.5 Resources and Infrastructure	[t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival	[t585] mm multiple_myeloma hgf myeloma surviving bortezomib cmet hepatocyte_growth_factor thalidomide patients
2.1 Exogenous Factors in the Origin and Cause of Cancer	[t130] hcv virus hepatitis_c hbv hepatitis_b hcv_infection infected infection viral antiviral	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
2.2 Endogenous Factors in the Origin and Cause of Cancer	[t532] mutations mutation gene patients familial families missense disease syndrome hereditary	[t59] copy_number chromosomal chromosome deletion deletions genomic gene genes regions fish
2.3 Interactions of Genes and/or Genetic Polymorphisms	[t544] snps snp genome_wide_association cases	[t437] risk risk_factors cohort prospective high_risk cases

with Exogenous and/or Endogenous Factors	genes controls genotyping variants loci genome_wide	follow_up collected controls population
3.1 Interventions to Prevent Cancer: Personal Behaviors that Affect Cancer Risk	[t200] alcohol dependence consumption alcoholism alcohol_use drinking abuse alcoholic alcoholics alcohol_related	[t511] adolescents adolescent youth substance_use behaviors risk adolescence youths prevention behavior
3.5 Complementary and Alternative Prevention Approaches	[t589] trial treatment placebo randomized patients baseline months trials participants randomized_controlled	[t663] hcc driving hepatocellular_carcinoma ablation drivers liver_cancer rf liver driver aflatoxin
4.1 Technology Development and/or Marker Discovery	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies	[t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
4.2 Technology and/or Marker Evaluation with Respect to Fundamental Parameters of Method	[t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets	[t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
4.3 Technology and/or Marker Testing in a Clinical Setting	[t463] diagnostic diagnosis specificity tests predictive accuracy patients clinical detection curve	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
4.4 Resources and Infrastructure Related to Detection, Diagnosis, or Prognosis	[t585] mm multiple_myeloma hgf myeloma surviving bortezomib cmet hepatocyte_growth_factor thalidomide patients	[t577] screening colorectal_cancer cancer_screening screen screened primary_care crc_screening tests preventive colonoscopy
5.1 Localized Therapies - Discovery and Development	[t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival	[t23] tumor tumors tumor_growth mice tumor_cells treatment xenografts therapy xenograft cancer
5.2 Localized Therapies - Clinical Applications	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage	[t496] dose treatment planning beam radiotherapy radiation_therapy patient imrt motion dosimetry
5.3 Systemic Therapies - Discovery and Development	[t370] tumor immunotherapy t_cells t_cell immunity anti_tumor antitumor cancer antigen patients	[t32] leukemia aml acute lymphoblastic mll acute_myeloid_leukemia leukemic pml leukemias patients
5.4 Systemic Therapies - Clinical Applications	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage	[t19] patients dose mg toxicity phase_i grade median days months treatment
5.5 Combinations of Localized and Systemic Therapies	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage	[t19] patients dose mg toxicity phase_i grade median days months treatment
5.6 Complementary and Alternative Treatment Approaches	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage	[t689] food dietary intake diet nutrition consumption foods intakes nutritional fat
5.7 Resources and Infrastructure Related to Treatment	[t317] survival patients stage prognostic recurrence outcome prognosis disease poor status	[t187] countries international india brazil global_health country global developing_countries public_health Thailand
6.1 Patient Care and Survivorship Issues	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage	[t686] cancer breast cancer_risk women cancers cancer_patients cancer_survivors treatment diagnosis diagnosed
6.2 Surveillance	[t437] risk risk_factors cohort prospective high_risk cases	[t497] breast cancer mammography women density

	follow_up collected controls population	mammographic screening cancer_risk breast_tissue benign
6.3 Behavior	[t577] screening colorectal_cancer cancer_screening screen screened primary_care crc_screening tests preventive colonoscopy	[t613] status health socioeconomic ses social education income discrimination disparities poor
6.4 Cost Analyses and Health Care Delivery	[t575] costs cost medicare cost_effectiveness healthcare medicaid coverage insurance claims care	[t252] treatment patients management patient outcomes clinical medical care clinicians decisions
6.5 Education and Communication	[t395] theory framework theoretical conceptual concept theories relationships behavior dynamic empirical	[t155] patients patient physicians care primary_care physician ed visits providers medical
6.7 Ethics and Confidentiality in Cancer Research	[t608] qualitative interviews experiences cultural social participants religious experience barriers quantitative	[t433] patients patient clinical diagnosis conclusions disease background diagnosed treated age
6.9 Resources and Infrastructure Related to Cancer Control, Survivorship, and Outcomes Research	[t374] incidence cases surveillance age trends population population_based prevalence diagnosis epidemiology	[t187] countries international india brazil global_health country global developing_countries public_health Thailand
7.1 Development and characterization of scientific models	[t23] tumor tumors tumor_growth mice tumor_cells treatment xenografts therapy xenograft cancer	[t600] proteins protein complexes functions protein_protein molecular biochemical family protein_complexes cellular
7.2 Application of scientific models	[t350] lymphoma b_cell cll nhl lymphomas leukemia non_hodgkin rituximab malignancies patients	[t585] mm multiple_myeloma hgf myeloma survivin bortezomib cmet hepatocyte_growth_factor thalidomide patients

Tableau 3: les relations entre les thèmes et les catégories CSO
Les subventions sont associées à une ou plusieurs categories CSO (ces catgégories sont associées manuellement aux subventions par l'équipe de l'INCa). Les deux premiers thèmes associés aux catégories CSO décrivent de manière plus détaillée quelle recherche est financée.

III. Comparaison avec le financement du NIH

Comment les propositions se situent-elles par rapport aux schémas de financement du NIH[5] ? Les quarante premiers thèmes financés par le NIH sont présentés dans l'annexe. Parmi les dix premiers domaines financés par l'INCa, quatre font partie des quarante premiers domaines du NIH :
[t430] cancer traitement thérapie tumeur patients chimiothérapie maladies tumeurs cancers thérapies (numéro 2) ;
[t621] gliome tumeurs tumeur cerveau glioblastome malin gliomes gbm sarcome survie (numéro 27) ;

[5] Le modèle thématique du NIH se trouve dans le domaine public. Des détails peuvent être visualisés à l'adresse www.nihmaps.org et saisissant l'identifiant thématique numérique
https://app.nihmaps.org/nih/browser/#data=nih.active;info=institutes%3Anih.active%3ANCI%3Atrue;showViz=false;
https://app.nihmaps.org/nih/browser/#center=0.000000%2C0.000000;data=nih.active;info=topics%3Anih.active%3A686%3Afalse;showViz=true;zoom=fit;

[t32] leucémie lma aigu lymphoblastique llm leucémie_myéloïde_aiguë leucémique lpm leucémies patients (numéro 25) et
[t370] tumeur immunothérapie lymphocytes_T lymphocyte_T immunité anti_tumeur antitumeur cancer antigène patients (numéro 370).

Il est également possible d'observer autrement le même tableau en examinant comment le NIH finance le premier domaine thématique financé par l'INCa, le n°428 (chimiothérapie, cancer, oncologie). La figure 4 donne une vue d'ensemble graphique. Le premier cadre identifie des expressions comparables dans le contexte du NIH (chimiothérapie adjuvante etc), des thèmes présents simultanément et des sujets comparables. Il indique également des étiquettes communes dans les propositions dont le thème 428 est le principal thème, comme les mots-clés simultanés du NIH (chimiothérapie, patient atteint de cancer), les codes CRISP du NIH (néoplasme/cancer chimiothérapie), les descripteurs MeSH de PubMed (antinéoplasique, chimiothérapie combinée).

Comme les données concernant le financement du programme du NIH sont publiques, le modèle thématique utilisé pour modéliser les données du NIH l'a également été pour modéliser les données HELIOS. **La possibilité de comparer les investissements effectués par différents schémas de financement dans le monde est l'une des réussites les plus enthousiasmantes du projet pilote HELIOS.**

Nous avons pu identifier des subventions NIH comparables pour chaque subvention de l'INCa en associant les termes (mots) dans les subventions NIH et les projets de l'INCa. La similarité standard mesurée par le cosinus tf-idf (fréquence du terme - fréquence inverse de document) a été utilisée pour calculer les similarités. Ce calcul produit une valeur comprise entre 0 et 1, 0 représentant aucune similarité et 1 représentant la similarité parfaite[6]. Les résultats sont visibles dans le panneau du bas de la figure 4, qui peut être utilisé pour identifier des expressions clés, des thèmes présents simultanément et similaires. Les informations de la figure 4 comprennent également des balises, comme les mots-clés de concept NIH associés au thème, ainsi que les termes MeSH de PubMed et les revues de PubMed. La figure identifie également les données associées de subvention et répertorie les subventions NIH les plus étroitement liées à ce domaine thématique.

[6] Une similarité de 0,6 est considérée comme une correspondance relativement bonne et une similarité de 0,4 est considérée comme une correspondance pertinente. Pour conserver un certain degré de précision, un seuil de 0,4 a été utilisé pour exclure les correspondances médiocres. Ceci signifie que pour certains projets de l'INCa, il n'y a pas de subvention NIH correspondante répertoriée (par ex. INCa_DGOS_1355 : biomarqueurs prédictifs de la réponse au traitement par AntiEGFR dans le cancer colorectal, n'a pas de subvention NIH correspondante répertoriée). Une raison possible de l'absence de subvention NIH correspondante pour ce projet est que le résumé du projet était relativement long et donc la similarité avec une subvention NIH particulière n'a pas excédé le seuil de 0,4.

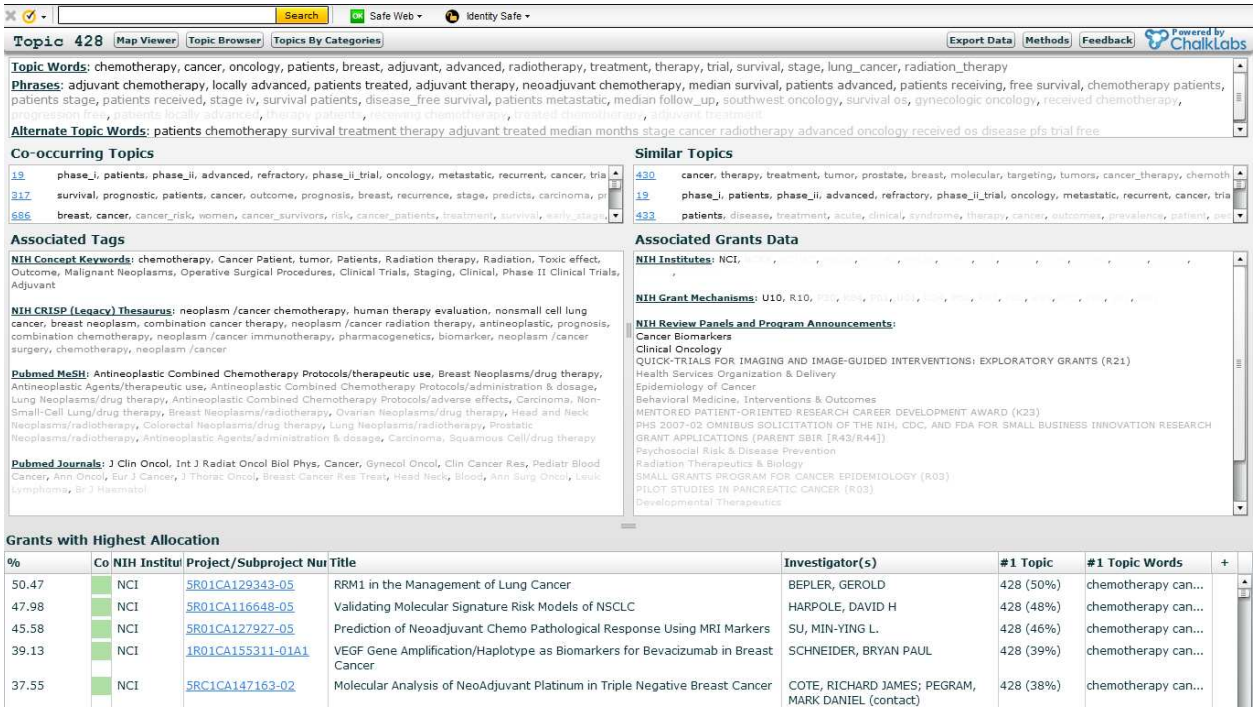

Figure 4: les thèmes majeurs soutenus par l'Inca dans le contexte des grants du NIH topic areas into the NIH context
La comparaison des subventions INCa et NIH est réalisée par rapprochement des termes presents dans les titres et les résumés des projets financés. Quatre des 10 premiers themes financés par l'INCa sont identifiés parmi les 40 premiers thèmes du NIH; les details des subventions du NIH comparables sont accessibles sur nihmaps.org . Une analyse plus approfondie apportera plus d'information sur les subventions non comparables.

Une manière plus intuitive de visualiser les mêmes données sous-jacentes de manière graphique est d'examiner les instituts du NIH ayant financé les mêmes domaines et des domaines apparentés. Ces informations sont présentées sur la figure 5. Celle-ci place le domaine thématique dans le contexte d'autres domaines de contexte apparenté, puis indique les instituts du NIH qui ont financé des recherches comparables, les mots du thème et les subventions le plus étroitement apparentées. Ces exemples présentent les résultats pour le thème 428, mais une analyse comparable peut être effectuée pour chaque domaine thématique financé par l'INCa.

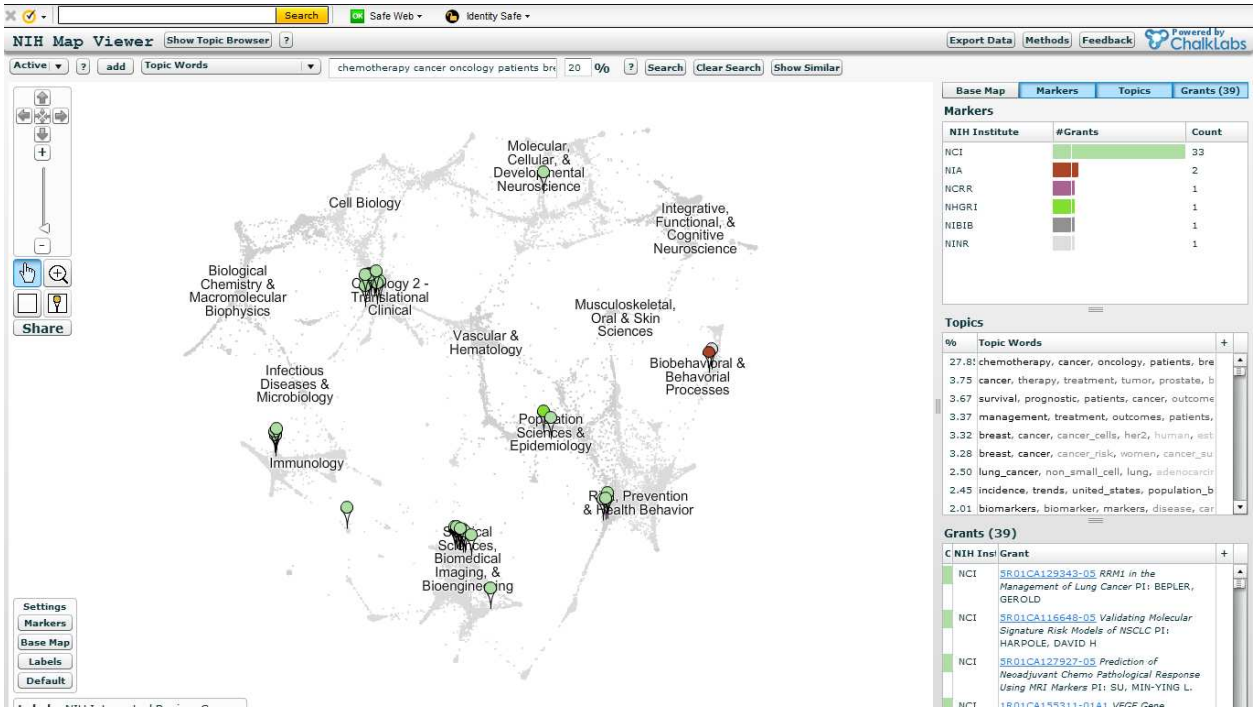

Figure 5: Les subventions de l'INCa et de la DGOS dans le contexte des grants du NIH (perspective d'une représentation visuelle)
Le projet HELIOS utilise la meme modélisation thématique que celle utilisée dans les programmes du NIH; l'information est en libre accès et la comparaison des investissements realisés par differentes agences internationales est possible.

5. Association entre les chercheurs financés par l'INCa et les publications, les brevets et les collaborations avec les entreprises

L'équipe a utilisé la correspondance de nom pour relier les 445 chercheurs de l'INCa aux publications historiques sur le cancer. La méthode ad-hoc de correspondance utilisée a permis à l'équipe d'identifier des publications pour environ 80 % des chercheurs INCa. Les résultats sont présentés dans le tableau 4. De nombreuses conclusions sont intéressantes. La première est que les chercheurs financés par l'INCa collaborent bien entre eux – par exemple en 2009, le nombre moyen de chercheurs INCa sur une publication était légèrement supérieur à deux, ce qui suggère que les équipes financées par l'INCa travaillent ensemble de manière continue. De la même manière, les chercheurs INCa collaborent bien avec les autres chercheurs – en 2009, le nombre moyen de chercheurs par chercheur INCa était presque de 6. Enfin, il semble y avoir une certaine collaboration avec le secteur privé. Environ un chercheur sur dix répertoriés sur les publications financées par l'INCa étaient associés à des entreprises. Et le nombre d'entreprises impliquées dans la recherche soutenue par l'INCa était en moyenne d'environ cinquante par an.

Tableau 4: Publications 1999-2009 associées aux chercheurs financés sur la période 2008-2009

Année de publication	Nombre de Publications	Chercheurs financés par l'INCa	Nombre total de chercheurs	Nombre de chercheurs des entreprises	Entreprises uniques
1999	436	565	3613	102	50
2000	444	575	3802	90	38
2001	464	595	4009	89	45
2002	509	671	4657	108	53
2003	527	714	4866	140	76
2004	579	792	5633	91	51
2005	651	891	6948	101	49
2006	667	929	7163	117	67
2007	838	1204	9372	166	98
2008	737	1557	8477	85	58
2009	726	1518	8897	154	57

Tableau 4. Publications 1999-2009 associées à des chercheurs INCa ayant reçu des subventions en 2008-2009
Le travail a été effectué avec des données existantes, vu les différences temporelles il est clair qu'aucune conclusion de causalité ne doit être établie entre les subventions et les publications.

L'équipe a également utilisé la correspondance de nom pour associer les 445 chercheurs INCa aux demandes de brevets historiques auprès de l'OEB et de l'OMPI ou aux brevets accordés par l'USPTO pour lesquels ils figurent en inventeurs ou cessionnaires. La méthode ad-hoc de correspondance utilisée a permis à l'équipe d'identifier des brevets pour plus de 15 % des chercheurs INCa dans la base de données. Les résultats sont présentés dans le tableau 5. En 2009, environ 15 % des chercheurs financés par l'INCa ont été impliqués dans des brevets avec en moyenne trois autres chercheurs. Plus de 100 entreprises ont été identifiées sur les brevets pour lesquels des chercheurs financés par l'INCa figurent au titre d'inventeurs ou de cessionnaires.

Table 5: Les dépôts de brevets aux offices EPO et WIPO ou les brevets délivrés par USPTO (1999-2009) associés aux chercheurs financés sur la période 2008-2009

Année du brevet	Nombre de brevets	Chercheurs financés par l'INCa	Nombre total de chercheurs	Entreprises uniques
1999	9	6	40	27
2000	6	5	21	20
2001	18	13	53	41
2002	9	8	31	26
2003	20	26	84	60
2004	28	23	101	60
2005	22	25	87	76
2006	26	40	101	71
2007	28	40	107	67
2008	33	37	125	78
2009	45	65	177	126

Tableau 5. Demande de brevets auprès de l'OEB et de l'OMPI ou brevets accordés par l'USPTO (1999 – 2009) associés à des chercheurs ayant reçu des subventions de l'INCa pendant la période 2008-2009
Le travail a été effectué avec des données existantes, vu les différences temporelles il est clair qu'aucune conclusion de causalité ne doit être établie entre les subventions et les brevets.

Un avantage supplémentaire de l'approche par la modélisation thématique est qu'il est possible d'analyser une partie du texte des publications produites par les chercheurs financés par l'INCa. Cette analyse peut à son tour éventuellement nous permettre de répondre à des questions essentielles telles que : « qu'est-ce qui a été fait et par qui, avec l'argent distribué par un schéma de financement donné ? » En soi, le modèle HELIOS permet de réaliser une analyse considérable sur la contribution de la recherche financée par l'INCa à la recherche française sur le cancer.

Dans le cadre de cette étude, nous avons appliqué le même modèle thématique aux publications dont nous disposions pour les données de subvention. Cette analyse décrit ainsi les activités de recherche des chercheurs financés par l'INCa ***avant*** qu'ils n'aient reçu le financement de l'INCa. Il est intéressant de noter que les trois premiers domaines de financement de l'INCa pour 2008 et 2009, t428, t19 et t319 sont également les domaines pour lesquels les chercheurs financés par l'INCa étaient les plus actifs en publications lors des années précédentes. Le financement de l'INCa est donc cohérent pour soutenir un domaine permanent de recherche.

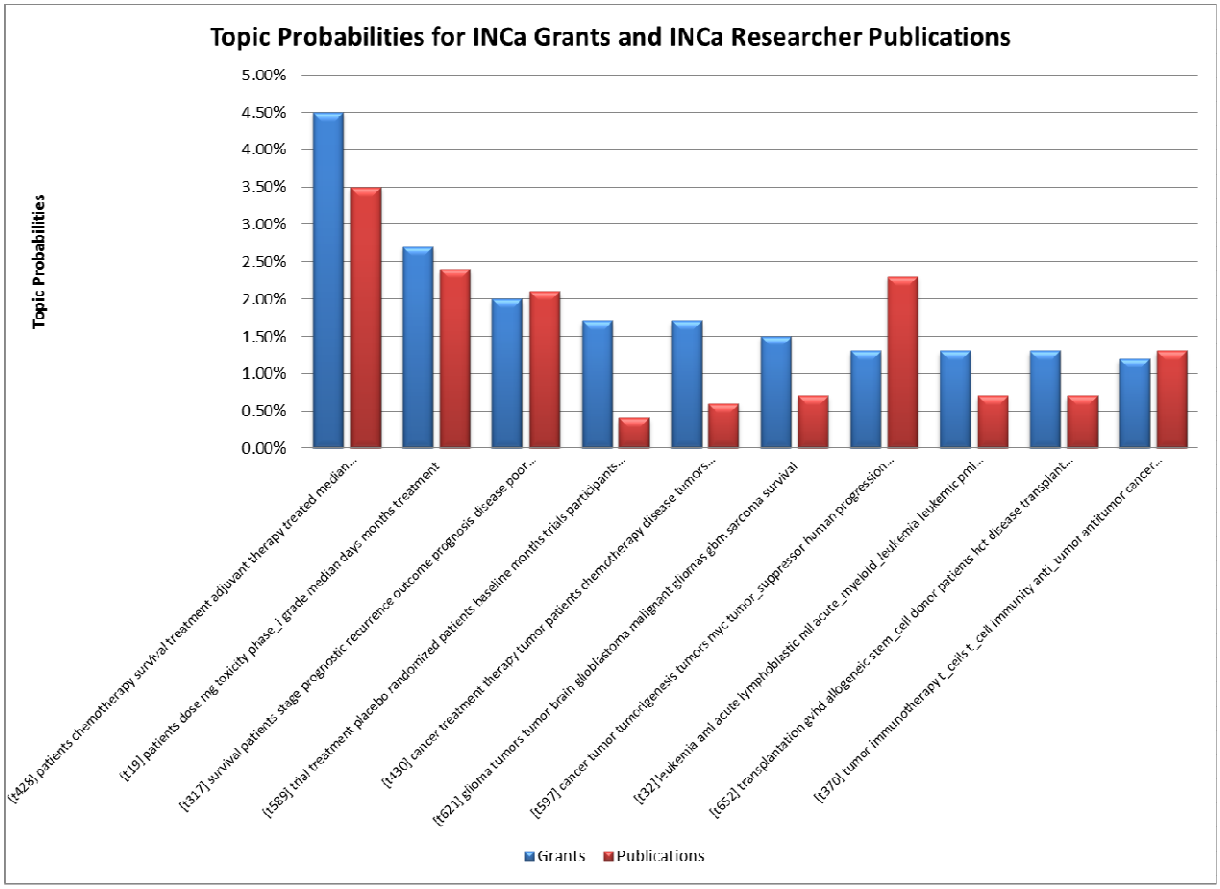

Figure 6. Principaux domaines thématiques des subventions de l'INCa et production en publication apparentée
Le travail a été effectué avec des données existantes, vu les différences temporelles il est clair qu'aucune conclusion de causalité ne doit être établie entre les subventions et les publications. Toutefois, on peut facilement décrire les activités de recherche des chercheurs financés par l'INCa ***avant*** qu'ils aient reçu le financement de l'INCa, et il est intéressant de noter que les trois premiers domaines de financement de l'INCa en 2008 et 2009 sont les domaines pour lesquels les chercheurs financés par l'INCa étaient les plus actifs en publications lors des années précédentes.

6. Lentille HELIOS

Les informations présentées sous forme de tableaux sont élaborées à partir des liens détaillés entre les chercheurs financés par l'INCa, les chercheurs d'entreprise et les entreprises elles-mêmes. Par conséquent, un outil de lentille pourrait être développé pour afficher ces liens détaillés de manière beaucoup plus intuitive et pour les visualiser à la fois en ce qui concerne les thèmes de travail des chercheurs et leur localisation géographique. L'équipe a développé des modèles de type « fil de fer » à cliquer pour présenter des exemples de ces visualisations. Le lien est le suivant http://bit.ly/helios-click. Il peut aussi être activé en cliquant sur la figure 2. L'outil de lentille pourrait facilement être développé pour montrer quels chercheurs soutenus par l'INCa collaborent avec quels chercheurs d'entreprise – soit par des brevets, soit par des publications ; quels instituts de recherche sont associés ; obtenir des détails sur les subventions associées aux chercheurs concernés et des détails sur les domaines thématiques utilisés comme axe de recherche.

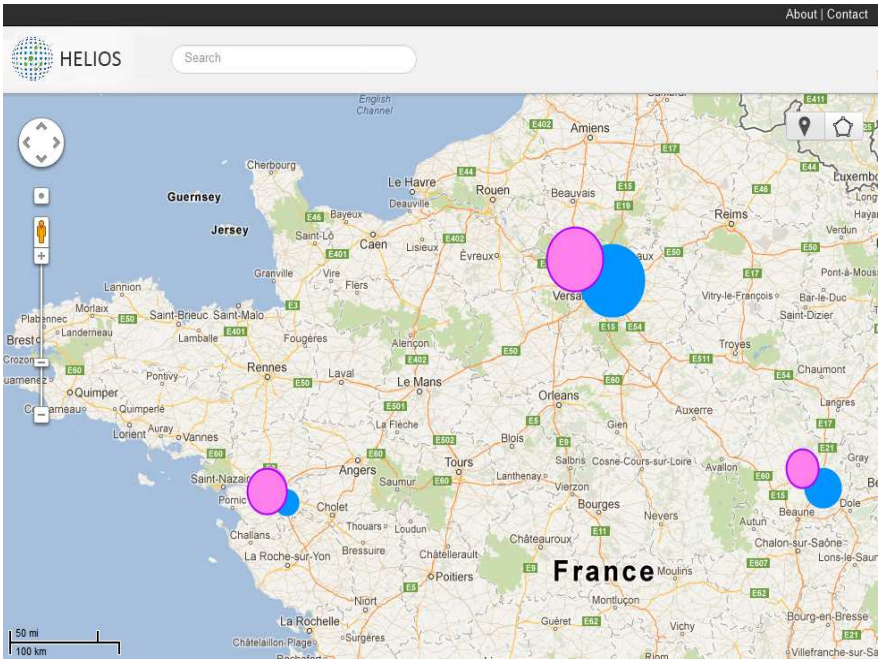

Figure 2. Visualisation géographique des collaborations de recherche
Des modèles de type « fil de fer » à cliquer ont été développés pour fournir des exemples de visualisation des thèmes sur lesquels des recherches sont effectuées et leur emplacement physique. L'outil de lentille a pour objectif de visualiser les réseaux universitaires et publics au travers des publications et des brevets.

7. Indicateurs potentiels

Un objectif majeur du projet était de documenter les résultats de l'investissement en recherche de l'INCa en déterminant comment les idées scientifiques sont créées et transmises par les réseaux scientifiques. Nous avons établi que cette documentation est possible. Si l'infrastructure HELIOS est construite, il serait possible de développer des indicateurs décrivant le processus scientifique. Parmi les exemples, on peut citer les suivants.

1. **Décrire, mesurer, visualiser et influencer l'impact de la recherche et son évolution entre la paillasse et la pratique en saisissant au niveau le plus granulaire les collaborations et les activités des équipes projet**

Exemples d'indicateurs
Nombre de collaborateurs internes et externes au sein de chaque projet
Nombre de collaborateurs internes et externes des chercheurs financés par l'INCa travaillant dans le même domaine de recherche
Délai nécessaire pour que les collaborations passent de l'idée à la diffusion
Nombre et proportion de chercheurs financés par l'INCa dans un domaine thématique donné au moment du financement
Nombre et proportion de chercheurs financés par l'INCa dans les périodes ultérieures.

2. **Décrire, mesurer et visualiser l'étendue de la couverture scientifique en identifiant les collaborations de recherche par individu dans les équipes de recherche ; au sein et au travers des domaines scientifiques, avec d'autres institutions en France, avec d'autres institutions au niveau international, avec l'industrie (voir http://youtube.com/v/z9ciIjH9M2A).**

Exemples d'indicateurs
Nombre de liens avec d'autres organisations de recherche
Nombre de liens avec des entreprises dans chaque domaine de recherche
Secteurs dans lesquels travaillent les collaborateurs
Institutions de chercheurs travaillant au niveau international sur des thèmes comparables

3. **Décrire, mesurer et visualiser le pipeline et les résultats pour les membres de l'équipe projet qui vont vraisemblablement alimenter l'économie régionale et nationale en associant leurs informations avec les thèmes et les domaines de recherche**

Exemples d'indicateurs
Nombre et poste des membres de l'équipe projet travaillant dans chaque domaine de recherche
Localisation des chercheurs
Force du lien entre les domaines thématiques et les activités de brevet

8. Extension potentielles

L'étendue de l'étude de faisabilité initiale était limitée en temps et en ressources. Les extensions possibles comprennent des étapes pour :

Développer l'étendue des données

1. **Améliorer notre connaissance de l'étendue de la recherche actuelle, en intégrant dans l'étude tous les projets soumis** (les projets soumis à l'INCa et les appels à projets de l'Institut cancer de l'alliance Aviesan/Inserm sont enregistrés).
   S'associer avec d'autres organisations de recherche pour identifier les personnes n'étant pas financées par l'INCa et l'Institut Cancer de l'alliance Aviesan/Inserm et leurs liens avec des entreprises par d'autres sources possibles de financement. Une approche possible serait d'inclure les investissements de recherche engagés par les deux principales associations sur le cancer en France, la Fondation ARC pour la recherche sur le cancer et la Ligue contre le cancer. Ces deux organismes investissent à eux deux environ 40 millions d'euros par an et ciblent la même communauté de recherche. Une autre approche serait de cibler la communauté de recherche financée par les programmes de l'ANR.

2. **Améliorer notre connaissance de la situation des chercheurs financés par l'INCa dans la population actuelle de chercheurs**
   Constituer un groupe de comparaison en intégrant l'annuaire de recherche sur le cancer en cours d'élaboration par l'Institut Cancer de l'alliance Aviesan. Celui-ci pourrait être utilisé pour créer un groupe de comparaison. Développer des idées approfondies sur le pipeline de chercheurs en intégrant la démographie de la recherche dans la base de données.

3. **Améliorer notre connaissance du suivi des activités des chercheurs en saisissant les subventions et les brevets ultérieurs**
   Constituer un ensemble de données prolongées dans le temps pour mieux comprendre l'intervalle de temps entre le financement et les publications et brevets ultérieurs.

Etendre les résultats

4. **Aller au-delà de l'étude des impacts économiques**, en reliant par exemple les subventions, les publications de recherche et les recommandations de pratique clinique.
   L'INCa produit des recommandations en collaboration avec la Haute autorité de santé (HAS). Une récente étude préliminaire sur les références citées dans les dernières recommandations 2012 INCa – HAS pour le lymphome d'Hodgkin a montré que parmi les 107 références des recommandations, 4 étaient issues d'équipes françaises (premier auteur français). Ce type d'information peut être utilisé pour examiner de manière plus détaillée comment et pourquoi les résultats

cliniques publiés par des équipes françaises éventuellement financées par l'INCa sont utilisées en pratique clinique.

5. **Relier les chercheurs financés par l'INCa et les membres d'équipe financée par l'INCa à leurs activités dans le secteur privé**, à condition de pouvoir mettre en place des protections de la confidentialité. Les données françaises concernant le lien entre l'employeur et le salarié font partie des meilleures au monde, et elles fournissent des liens directs entre un échantillon aléatoire de personnes et les entreprises dans lesquelles celles-ci travaillent (Abowd, Corbel, & Kramarz, 1999 ; Reberioux, Petit, & Perraudin, 2011). Ceci pourrait ensuite être utilisé pour développer des informations sur les salaires de départ, les parcours de carrière et la productivité des entreprises associées à des chercheurs financés par l'INCa.

Développer la diffusion

6. **Élaborer un site Internet pour permettre une utilisation interactive d'HELIOS**

En conclusion, cette étude de faisabilité montre clairement qu'il est possible de relier le financement aux publications et aux brevets par l'intermédiaire des individus, tout en conservant les informations sur les thèmes qui étaient ciblés dans chaque cas. Cette nouvelle approche de l'information sur la manière de faire de la recherche constitue l'étape essentielle pour ouvrir la voie à la description des résultats du financement sur les collaborations de recherche et les activités scientifiques résultantes.

9. References

Abowd, J., Corbel, P., & Kramarz, F. (1999). The Entry and Exit of Workers and the Growth of Employment: An Analysis of French Establishments. *Review of Economics and Statistics*, *81*(2), 170-187.

Blei, D., Ng, A., & Jordan, M. (2003). Latent Dirichlet Allocation. *Journal of Machine Learning Research*, 993-1022.

Newman, D., Hagedorn, K., Chemudugunta, C., & Smyth, P. (2007). Subject Metadata Enrichment using Statistical Topic Models. *Proceedings of the 7th Acm/Iee Joint Conference on Digital Libraries*, 366-375. Retrieved from <Go to ISI>://000266062800056

Priem, J., & Hemminger, B. (2010). 2.0: Toward new metrics of scholarly impact on the social Web. *First Monday*, *15*(7).

Reberioux, A., Petit, H., & Perraudin, C. (2011). Worker Information and Firm Disclosure: Analysis on French Linked Employer Employee Data. *http://ssrn.com/abstract=1972958*.

10. Annexes

A. Données relatives aux subventions

Les données utilisées dans la phase de faisabilité de l'étude comprennent les subventions issues des appels à projets de 2008 et 2009. 24 appels ont été rapportés dans l'étude de faisabilité, la plupart étant gérés par l'INCa, le reste par d'autres organisations (Inserm, ANR) mais avec un financement apporté par l'INCa.

Liste des appels 2008 : recherche clinique (PHRC et STIC), biologie (PLBIO), formation en recherche translationnelle (FOR), programme d' actions intégrées de recherche sur le lymphome (PAIR LYM), programme pour les resources biologiques (GRB), recherche en sciences humaines et sociales, épidémiologie et en santé publique (SHS, SP), soutien des jeunes équipes d'excellence (ATIP/Avenir), programme pour une interface chimie/sciences de la vie (PCV), programme conjoint de recherche translationnelle avec l'Allemange (DAAD), programme de lutte contre les addictions (MILDT).

Liste des appels 2009 : recherche clinique (PHRC et STIC), biologie (PLBIO), recherche translationnelle et formation (Transla et FOR), programme d'actions intégrées de recherche sur l'hépatocarcinome (PAIR CHC), recherche en sciences humaines et sociales, épidémiologie et en santé publique (SHS, SP), soutien des jeunes équipes d'excellence et des internes (ATIP/Avenir, Interne), programme en collaboration avec le NCI (CTEP).

Les données comprennent : le titre (anglais et français), les résumés (anglais et français), les dates de début et de fin des projets et leur budget, la catégories CSO et le ou les types de cancer associés au projet (attribués par le personnel de l'INCa), le montant (en euros), le nom et le prénom de l' investigateur principal et les noms et prénoms des participants associés, le code de la subvention.

Des **données supplémentaires** étaient disponibles pour les subventions 2009 description complète du projet présentée lors de la demande de subvention, curriculum vitae des investigateurs, le poste (les institutions et noms du laboratoire) des personnes impliquées dans l'étude, les références bibliographiques, le financement détaillé.

Les **codes de subvention** des programmes de recherche clinique issus de la Direction générale de l'organisation des soins (DGOS, ministère de la Santé) gérés par l'INCa, à savoir les programmes PHRC et STIC, sont indiqués sous la forme : DGOS_n° projet.
Les codes de subvention des programmes de recherche de l'INCa ou des projets sélectionnés par une autre agence de recherche mais abordant le cancer et donc financés par l'INCa sont indiqués sous la forme : INCa_n° projet

À l'exception des données de financement, toutes les données utilisées dans l'étude de faisabilité Helios sont des données publiques, et sont disponibles sur le site Internet de l'INCa (base de données publique http://lesdonnees.e-cancer.fr/les-projets-de-recherche.html) et sur le site Internet de l'ICRP (https://www.icrpartnership.org/).

B. Données relatives aux chercheurs

L'Institut Cancer de l'alliance Aviesan est en train d'élaborer un **annuaire** décrivant le paysage des équipes de recherche dans le domaine du cancer en France.

La phase de faisabilité de l'étude a utilisé les données suivantes.

- Nom du laboratoire, nom et prénom du directeur, ISI_Auteur
- Nom des équipes de recherche, nom et prénom des responsables d'équipes de recherche
- Affiliation du laboratoire à un organisme de recherche (Inserm, CNRS, CEA, INRIA, Institut Pasteur, INRIA, Institut Curie, université, hôpital universitaire) : en général chaque équipe de recherche dispose de plusieurs affiliations parallèles

dans l'ensemble, plus de 700 équipes de recherche ont été répertoriées dans l'annuaire. L'annuaire est encore en cours d'élaboration et un annuaire complet devrait être disponible dans les mois à venir.

C. Contexte sur la modélisation thématique

La modélisation thématique est un algorithme informatique permettant d'apprendre les thèmes d'un ensemble de documents de texte. Pour un ensemble de bibliographie universitaire (publications, articles, livres blancs, propositions), le modèle thématique apprend automatiquement les catégories qui décrivent les idées (par ex. recherche). Les thèmes sont appris directement à partir des mots utilisés dans le texte (titre, résumé, document de texte complet). Un avantage majeur de cette approche est qu'il n'est pas nécessaire de disposer de dictionnaires, de thésaurus, d'ontologies ou d'autres schémas de catégorisation. Les thèmes appris sont en général sensés, intuitifs et cohérents. Les thèmes convertissent le texte en mesure chiffrée (pouvant mesurer des proportions, des regroupements, des tendances). La modélisation thématique est mature et bien étudiée. La modélisation thématique peut être utilisée à des échelles très différentes (possibilité de modéliser le thème de millions de documents). Les thèmes peuvent servir à créer des rapports utiles. Les thèmes peuvent constituer la base analytique pour structurer, organiser et comprendre des jeux de documents.

Introduction

La modélisation thématique est une méthodologie qui extrait ou apprend automatiquement un jeu de thèmes décrivant un ensemble de documents de texte. Le modèle thématique est une méthodologie sans supervision : il apprend les thèmes directement à partir des données de texte et il n'a pas besoin de dictionnaires, de thésaurus ou d'autres ontologies. Le modèle thématique a évolué à partir de techniques plus anciennes comme l'indexation sémantique latente. Le modèle thématique tire son origine de l'hypothèse que des documents individuels présentent un petit nombre de thèmes. Le modèle thématique apprend à partir de schémas de termes à grande échelle qui ont tendance à être présents simultanément dans les documents. La modélisation thématique constitue une alternative à la classificiation pré-existante possible ou aux schémas de catégorisation, et elle peut être utilisée conjointement à ces schémas pré-existants. La modélisation thématique crée une base unifiée de thèmes pour un vaste éventail

d'analyses. La représentation du thème apporte une structure immédiate pour comparer, ressortir et associer des documents de texte. Les thèmes représentent une base pratique pour effectuer des requêtes et des rapports. De même, les thèmes constituent une base utile pour les visualisations, que ce soit pour calculer des relations entre des documents ou pour annoter et coder en couleur des visualisations. La liste suivante donne une idée rapide de l'étendue des questions qui trouveraient une réponse par l'approche de la modélisation thématique.

Comment (du point du vue thématique) les documents ont-ils évolué entre 2010 et 2012 ?
Quels sont les documents comparables à ce jeu de documents ?
Quel est la composition thématique des documents de la catégorie X ?
Quels sont les documents associés à une requête donnée de mots-clés ?
Quels sont les thèmes communs entre les jeux de documents X et Y ?

La modélisation thématique (également dénommée LDA ou Allocation Dirichlet Latente) est largement considérée comme étant la meilleure méthode pour extraire automatiquement le contenu sémantique d'ensembles de documents de texte. Le modèle thématique apprend simultanément un jeu de thèmes qui décrivent un ensemble de documents et une liste courte de thèmes associés à chaque document dans l'ensemble. Les thèmes appris automatiquement sont des répartitions centrées sur les termes qui se rapportent à des thèmes ou des domaines de sujet, et pour la bibliographie scientifique, la plupart des thèmes correspondent bien aux domaines de recherche. Par exemple, le tableau ci-dessous répertorie des exemples de thèmes appris à partir d'un ensemble de résumés de projets scientifiques. Dans le tableau, les thèmes appris sont indiqués sur la gauche et les mots-clés fournis par les hommes sur la droite, pour insister sur le fait que les thèmes viennent avant les mots-clés. Ces exemples montrent comment les thèmes appris peuvent saisir les disciplines scientifiques.

Tableau 1. Quelques exemples de themes appris à partir des résumés scientifques des projets.

Thèmes appris	**Thèmes donnés manuellement**
policy public government policies organization local agencies maker private …	PUBLIC POLICY
black gravitational hole holes wave relativity waves gravity general ...	RELATIVITY
mobile wireless network spectrum communication devices radio access …	WIRELESS NETWORKS
plant insect species ant interaction pollinator host pollination flower herbivores ...	BIOLOGY
user software end interface tool web interfaces interactive task need ...	SOFTWARE
data dimensional algorithm matrix dimension analysis reduction sparse method ...	MATHEMATICS
chemistry organic reaction synthesis synthetic method compound chiral...	ORGANIC CHEMISTRY
genes gene genetic expression function gene_expression regulatory specific ...	GENE EXPRESSION
economic labor worker income effect inequality household job policy market ...	ECONOMICS
material matter electron quantum physics transition properties states theoretical …	QUANTUM PHYSICS

Note: les themes sont appris de manière automatique par la modélisation thématique, les themes listés en majuscule sont assignés manuellement

Par définition, les thèmes appris par le modèle thématique constituent une représentation (de dimensionalité réduite) d'un document unique et caractérisent donc spécifiquement un document unique. Le tableau 2 illustre cet exemple. Ce document sur les interfaces multimodales est nettement caractérisé par une liste courte de thèmes (les 4 premiers thèmes sont indiqués avec leur pourcentage d'affectation).

Tableau 2. Exemples de themes multiples pour un document unique

Titre du Document: Multi-modal Interface for Retrieval of Perceptually and Semantically Similar Biomedical Images

(14%) information search web text retrieval document semantic user content tool
(12%) imaging image medical method tomography reconstruction inverse optical
(12%) visual environment object virtual information eye world movement human
(10%) user software end interface tool web interfaces interactive task need computer

Note: Les themes qui comptabilisent moins de 10% des mots dans les subventions ne sont pas indiqués

Par leur nature additive, un jeu de documents peut également être caractérisé par un mélange ou un histogramme de thèmes. Par cette approche, les thèmes constituent un moyen pour comprendre un *jeu* de documents. Par exemple, on pourrait caractériser la constitution thématique d'un jeu donné de documents. En agrégeant sur des intervalles de temps distincts, on pourrait mesurer (thématiquement) comment les jeux de documents évoluent au cours du temps. De manière plus générale, il est possible d'agréger sur toute métadonnée disponible.

Description technique de l'approche de modélisation thématique

La modélisation thématique implique plusieurs étapes.
La tokénisation des données brutes de texte pour créer une représentation de chaque document par un sac de mots.
L'exécution du modèle thématique (notamment le choix du nombre de thèmes, c'est-à-dire la résolution thématique).
La conservation et l'interprétation des thèmes appris, éventuellement en incluant un étiquetage humain des thèmes.
L'intégration ou l'utilisation des données thématiques dans une interface utilisateur interactive ou interrogeable.

Tokénisation
La tokénisation est le processus de conversion d'un ensemble de documents de texte en une représentation en sac de mots, qui correspond à l'entrée pour le modèle thématique. Dans la représentation en sac de mots, on élimine l'ordre des mots, et chaque document est représenté par une liste de termes avec leur nombre. On exclut en général les mots vides fréquents de la liste des termes ou du vocabulaire. Outre les mots vides habituels de type *'et'* et *'le'*, il peut être intéressant d'omettre également des termes fréquents mais inutiles du point de vue thématique. Par exemple, dans les documents scientifiques, des termes tels que *'étude'*, *'projet'*, *'recherche'* et des termes standard n'ajoutent probablement pas d'informations intéressantes aux thèmes appris et ces termes peuvent donc être omis. Certaines décisions de tokénisation doivent être prises à propos des expressions à

plusieurs mots. Par exemple, il peut être utile de conserver *études_cliniques* comme un seul token plutôt que d'utiliser les termes distincts *études* et *cliniques*.

Exécution du modèle thématique
L'exécution d'un modèle thématique est une tâche relativement simple. Dans ce Livre blanc, nous allons supposer que nous utilisons le modèle thématique standard de LDA (Blei *et al.*, 2003). Il existe toutefois une grande variété de modèles thématiques qui ont évolué à partir du modèle thématique standard de LDA. Le LDA comporte un seul paramètre d'entrée, T, le nombre de thèmes (même si nous insistons sur le fait que certains modèles thématiques apprennent le nombre approprié de thèmes). Le modèle thématique LDA produit trois fichiers de résultats.

L'attribution thématique à chaque mot élémentaire dans le corpus
Un jeu de thèmes T, où chaque thème est indiqué par les 10 premiers mots du thème
Un ensemble de mélange de thèmes D, indiquant les thèmes fractionnaires de chaque document

La section suivante comporte une description plus technique du modèle thématique.

Il existe plusieurs approches pour orienter le choix de T, le nombre de thèmes à apprendre. Par exemple, on peut sélectionner T pour augmenter la vraisemblance des données de test. Toutefois, quand le consommateur direct de l'information thématique est humain, une approche sensée consiste à apprendre les modèles thématiques pour un ensemble de paramétrages de T, puis à sélectionner un paramètre préféré pour le T en fonction d'un examen des thèmes appris. Il existe des cas où des utilisateurs finaux différents (ayant des besoins d'information différents) seront intéressés par des résolutions thématiques distinctes. Dans ce cas, on pourrait apprendre directement un modèle thématique hiérarchique, ou un jeu de modèles thématiques différents pour obtenir les différentes résolutions thématiques d'intérêt.

La modélisation thématique est une technique plus puissante que l'agrégation de documents. Dans l'agrégation de documents, les documents similaires sont regroupés en agrégats et chaque document appartient à un seul agrégat. La représentation est plus riche dans la modélisation thématique, car les documents appartiennent à plus d'un thème. La modélisation thématique a évolué et s'est améliorée par rapport aux techniques de réduction de dimensionnalité précédentes comme l'analyse sémantique latente. La modélisation thématique pourrait être considérée comme la version statistique ou bayésienne de l'analyse sémantique latente, bénéficiant de tous les avantages et de l'extensibilité du cadre probabiliste.

Conservation, interprétation et étiquetage
Une fois que le modèle thématique a été calculé, on revoit en général le jeu de thèmes à des fins d'assurance qualité. Pour les ensembles de résumés de subvention, les thèmes sont généralement cohérents et de bonne qualité. Alors que la majorité des thèmes se rapportent à des disciplines scientifiques particulières, certains thèmes se rapportent à des concepts fonctionnels ou méthodologiques. Par exemple, le thème *interaction effet facteur influence affecter comportement environnement niveau* se rapporte non pas à un domaine spécifique de recherche mais à des termes plus généraux qui pourraient être utilisés pour décrire des expériences scientifiques. Selon l'usage prévu et le public des modèles

thématiques appris, il peut être préférable d'attribuer des étiquettes courtes aux thèmes. L'attribution d'une étiquette courte à un thème peut être guidée en listant les phrases fréquentes liées à ce thème. Même si des progrès ont été réalisés sur l'attribution automatique d'étiquettes courtes aux thèmes, il est préférable en général, et en particulier pour les outils pour utilisateurs, d'utiliser des étiquettes de thème attribuées par des hommes.

Intégration ou utilisation des données thématiques
Les résultats du modèle thématique sont composés de deux jeux de répartitions de probabilité (un jeu de répartitions T sur les mots, et un jeu de répartitions D sur les thèmes), ainsi que la liste des attributions thématiques à chaque mot dans le corpus. Ces distributions de probabilité expliquent le corpus – au sens bayésien – selon le modèle de LDA. En général, on utilise ce résultat de modèle thématique dans une interface pour extraire la connaissance de l'ensemble. En démarrant par des questions simples telles que « Quels sont les thèmes présents dans le document ? » et « Quels documents se rapportent à ce thème ? », on peut construire des analyses sophistiquées à l'aide de la représentation thématique apprise. On peut aussi calculer facilement des informations utiles notamment les thèmes comparables et les thèmes présents simultanément pour un thème donné.

D. Les Thèmes identifiés dans les projets

Tableau 3 : Liste des thèmes des projets financés par l'INCa et la DGOS 2008-2009 (316 projets)

Rang	Pourcentage	Thème
1	4.5%	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
2	2.7%	[t19] patients dose mg toxicity phase_i grade median days months treatment
3	2.0%	[t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
4	1.7%	[t589] trial treatment placebo randomized patients baseline months trials participants randomized_controlled
5	1.7%	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
6	1.5%	[t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival
7	1.3%	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
8	1.3%	[t32] leukemia aml acute lymphoblastic mll acute_myeloid_leukemia leukemic pml leukemias patients
9	1.3%	[t652] transplantation gvhd allogeneic stem_cell donor patients hct disease transplant graft_versus_host
10	1.2%	[t370] tumor immunotherapy t_cells t_cell immunity anti_tumor antitumor cancer antigen patients
11	1.2%	[t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets
12	1.1%	[t350] lymphoma b_cell cll nhl lymphomas leukemia non_hodgkin rituximab malignancies patients
13	1.1%	[t433] patients patient clinical diagnosis conclusions disease background diagnosed treated age
14	1.1%	[t187] countries international india brazil global_health country global developing_countries public_health thailand
15	1.1%	[t346] biomarkers markers biomarker disease patients marker serum diagnostic diagnosis samples

16	1.1%	[t126] treatment therapy patients treated efficacy therapies treatments patient therapeutic benefit
17	1.0%	[t445] melanoma tumour melanomas melanocytes tumours metastatic cpg odn cells nis
18	1.0%	[t463] diagnostic diagnosis specificity tests predictive accuracy patients clinical detection curve
19	0.9%	[t16] metastasis invasion tumor metastatic progression cancer cells tumor_cells invasive tumor_cell
20	0.9%	[t686] cancer breast cancer_risk women cancers cancer_patients cancer_survivors treatment diagnosis diagnosed
21	0.9%	[t44] tissue tissues specimens sections staining pathology samples fixed immunohistochemistry histology
22	0.9%	[t437] risk risk_factors cohort prospective high_risk cases follow_up collected controls population
23	0.8%	[t23] tumor tumors tumor_growth mice tumor_cells treatment xenografts therapy xenograft cancer
24	0.8%	[t410] surgery surgical patients postoperative undergoing bypass resection complications outcomes preoperative
25	0.8%	[t532] mutations mutation gene patients familial families missense disease syndrome hereditary
26	0.7%	[t166] criteria guidelines consensus recommendations definition american national definitions met recommended
27	0.7%	[t360] lesions lesion carcinoma tumors cases benign malignant invasive tumor in_situ
28	0.7%	[t496] dose treatment planning beam radiotherapy radiation_therapy patient imrt motion dosimetry
29	0.7%	[t101] fact nature find view thought body appears issue true natural
30	0.7%	[t193] molecular cellular biology biochemical targets genetic therapeutic biological pathways molecules
31	0.7%	[t577] screening colorectal_cancer cancer_screening screen screened primary_care crc_screening tests preventive
32	0.7%	[t59] copy_number chromosomal chromosome deletion deletions genomic gene genes regions fish
33	0.6%	[t480] therapeutic agents treatment therapies targets targeting therapy drugs inhibitors clinical_trials
34	0.6%	[t278] hpv head_and_neck human cervical papillomavirus cervical_cancer hnscc hpv16 e6 squamous_cell
35	0.6%	[t252] treatment patients management patient outcomes clinical medical care clinicians decisions
36	0.6%	[t30] clinical basic team expertise translational disease innovative investigators multidisciplinary biology
37	0.5%	[t182] breast cancer her2 cancer_cells human mcf7 neu cancers mda tumors
38	0.5%	[t585] mm multiple_myeloma hgf myeloma survivin bortezomib cmet hepatocyte_growth_factor thalidomide patients
39	0.5%	[t293] vegf angiogenesis vascular_endothelial_growth_factor angiogenic endothelial_cells vascular vegfr receptor
40	0.5%	[t612] bone_marrow cells hsc hematopoietic bm stem_cell hscs hematopoietic_stem_cells marrow transplantation

Tableau 4 : Liste des thèmes dans les publications scientifques françaises 1999-2010 (31 871 publications)

Rang	Pourcentage	Thème
1	3.5%	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
2	2.4%	[t360] lesions lesion carcinoma tumors cases benign malignant invasive tumor in_situ
3	2.4%	[t19] patients dose mg toxicity phase_i grade median days months treatment
4	2.1%	[t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
5	2.0%	[t433] patients patient clinical diagnosis conclusions disease background diagnosed treated age
6	1.8%	[t410] surgery surgical patients postoperative undergoing bypass resection complications outcomes preoperative
7	1.1%	[t581] risk ci odds confidence ratio interval cases controls adjusted rr
8	0.9%	[t350] lymphoma b_cell cll nhl lymphomas leukemia non_hodgkin rituximab malignancies patients
9	0.8%	[t532] mutations mutation gene patients familial families missense disease syndrome hereditary
10	0.8%	[t59] copy_number chromosomal chromosome deletion deletions genomic gene genes regions fish
11	0.8%	[t23] tumor tumors tumor_growth mice tumor_cells treatment xenografts therapy xenograft cancer
12	0.7%	[t126] treatment therapy patients treated efficacy therapies treatments patient therapeutic benefit
13	0.7%	[t445] melanoma tumour melanomas melanocytes tumours metastatic cpg odn cells nis
14	0.7%	[t106] syndrome patients congenital disorders abnormalities disorder disease syndromes clinical diagnosis
15	0.7%	[t342] prostate cancer psa antigen prostate_specific prostatic prostatectomy radical biopsy gleason
16	0.7%	[t374] incidence cases surveillance age trends population population_based prevalence diagnosis epidemiology
17	0.7%	[t32] leukemia aml acute lymphoblastic mll acute_myeloid_leukemia leukemic pml leukemias patients
18	0.7%	[t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival
19	0.7%	[t652] transplantation gvhd allogeneic stem_cell donor patients hct disease transplant graft_versus_host
20	0.6%	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
21	0.6%	[t686] cancer breast cancer_risk women cancers cancer_patients cancer_survivors treatment diagnosis diagnosed
22	0.6%	[t527] cells cell_lines human apoptosis treatment cytotoxicity cancer_cells anticancer cytotoxic cancer
23	0.6%	[t278] hpv head_and_neck human cervical papillomavirus cervical_cancer hnscc hpv16 e6 squamous_cell
24	0.6%	[t463] diagnostic diagnosis specificity tests predictive accuracy patients clinical detection curve
25	0.6%	[t16] metastasis invasion tumor metastatic progression cancer cells tumor_cells invasive tumor_cell
26	0.6%	[t133] cisplatin paclitaxel drugs synergistic chemotherapy drug treatment agents cpt anticancer
27	0.5%	[t496] dose treatment planning beam radiotherapy radiation_therapy patient imrt motion dosimetry
28	0.5%	[t323] mortality risk death ci incident hazard follow_up confidence baseline ratio
29	0.5%	[t182] breast cancer her2 cancer_cells human mcf7 neu cancers mda tumors
30	0.5%	[t166] criteria guidelines consensus recommendations definition american national definitions met recommended

31	0.5%	[t381] lymphatic lymph_node ln lymph_nodes sb lymph sentinel dm1 lymphedema lymphangiogenesis
32	0.5%	[t447] colorectal_cancer colon_cancer colon crc colorectal apc colonic adenomas polyps adenoma
33	0.4%	[t36] mrna protein rt_pcr protein_expression quantitative gene_expression fold expressed real_time polymerase
34	0.4%	[t187] countries international india brazil global_health country global developing_countries public_health thailand
35	0.4%	[t387] apoptosis cell_death cells caspase_3 apoptotic caspase necrosis parp1 death parp
36	0.4%	[t234] cells human expressing transfected cell_lines cell_line expressed express stably cho
37	0.4%	[t44] tissue tissues specimens sections staining pathology samples fixed immunohistochemistry histology
38	0.4%	[t595] ovarian_cancer ovarian endometrial_cancer endometrial epithelial carcinoma peritoneal cancers mesothelioma
39	0.4%	[t201] ct volume computed_tomography scans chest scan volumes mm nodules imaging
40	0.4%	[t589] trial treatment placebo randomized patients baseline months trials participants randomized_controlled

Tableau 5 : Liste des thèmes financés par le US NCI , 2006

Rang	Pourcentage	Thème
1	3.7%	[t210] cancer cancer_center program cancer_research spore programs members center nci shared
2	2.5%	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
3	2.3%	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
4	1.8%	[t16] metastasis invasion tumor metastatic progression cancer cells tumor_cells invasive tumor_cell
5	1.6%	[t686] cancer breast cancer_risk women cancers cancer_patients cancer_survivors treatment diagnosis diagnosed
6	1.3%	[t480] therapeutic agents treatment therapies targets targeting therapy drugs inhibitors clinical_trials
7	1.3%	[t370] tumor immunotherapy t_cells t_cell immunity anti_tumor antitumor cancer antigen patients
8	1.1%	[t345] clinical_trials trials oncology cancer treatment clinical_research patients unit program clinical_trial
9	1.1%	[t603] intervention interventions prevention program pilot efficacy behavioral reduce effectiveness trial
10	1.0%	[t660] prostate cancer pca cancer_cells lncap androgen progression human pc prostatic
11	1.0%	[t182] breast cancer her2 cancer_cells human mcf7 neu cancers mda tumors
12	0.9%	[t346] biomarkers markers biomarker disease patients marker serum diagnostic diagnosis samples
13	0.9%	[t591] training program trainees postdoctoral faculty predoctoral students fellows programs scientists
14	0.9%	[t437] risk risk_factors cohort prospective high_risk cases follow_up collected controls population
15	0.8%	[t462] health health_disparities minority disparities community center populations underserved healthcare ethnic
16	0.8%	[t252] treatment patients management patient outcomes clinical medical care clinicians decisions
17	0.8%	[t351] community implementation health community_based prevention programs practice public_health communities
18	0.8%	[t23] tumor tumors tumor_growth mice tumor_cells treatment xenografts therapy xenograft cancer

19	0.8%	[t171] committee scientific administrative management planning meetings staff director internal program
20	0.8%	[t30] clinical basic team expertise translational disease innovative investigators multidisciplinary biology
21	0.8%	[t417] program training clinical_research career faculty mentoring investigators junior patient_oriented epidemiology
22	0.8%	[t447] colorectal_cancer colon_cancer colon crc colorectal apc colonic adenomas polyps adenoma
23	0.7%	[t695] core statistical projects biostatistics investigators data_management design database clinical resource
24	0.7%	[t580] training candidate career skills applicant program expertise mentored experience environment
25	0.7%	[t32] leukemia aml acute lymphoblastic mll acute_myeloid_leukemia leukemic pml leukemias patients
26	0.6%	[t577] screening colorectal_cancer cancer_screening screen screened primary_care crc_screening tests preventive
27	0.6%	[t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival
28	0.6%	[t173] genetic genes risk susceptibility polymorphisms genetics disease gene_environment etiology gene
29	0.6%	[t178] training program trainees faculty clinical medicine molecular biology basic pediatric
30	0.5%	[t412] imaging image small_animal spect pet detector molecular high_resolution scanner resolution
31	0.5%	[t128] nanoparticles delivery nanoparticle drug_delivery particles drug targeting release liposomes particle
32	0.5%	[t193] molecular cellular biology biochemical targets genetic therapeutic biological pathways molecules
33	0.5%	[t94] center projects core program cores investigators pilot program_project scientific theme
34	0.5%	[t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets
35	0.5%	[t224] p53 mdm2 arf apoptosis tumor_suppressor p16 p63 p21 p53_dependent p73
36	0.5%	[t544] snps snp genome_wide_association cases genes controls genotyping variants loci genome_wide
37	0.5%	[t444] lung_cancer lung nsclc non_small_cell adenocarcinoma cancers lung_tumors cancer a549 tumor
38	0.5%	[t278] hpv head_and_neck human cervical papillomavirus cervical_cancer hnscc hpv16 e6 squamous_cell
39	0.5%	[t239] inhibitors compounds potent design agents small_molecule drugs class selectivity action
40	0.5%	[t527] cells cell_lines human apoptosis treatment cytotoxicity cancer_cells anticancer cytotoxic cancer

E. Provenance des données de publication et de brevet

Provenance des données de publication et de brevet

Les données de publication et de brevet dans le domaine de la recherche sur le cancer utilisées dans l'étude de faisabilité HELIOS sont issues de deux études bibliométriques réalisées en 2010 et 2011 par l'Observatoire des sciences et des techniques (OST), à la demande de l'Institut national de la santé et de la recherche médicale (Inserm) pour l'institut Cancer de l'alliance Aviesan et l'Institut national du cancer (INCa).

L'objectif de ces études était de caractériser, à l'aide d'indicateurs bibliométriques, le positionnementet les activités scientifiques et technologiques de la France et des autres pays majeurs dans le domaine de la recherche sur le cancer. Il était donc nécessaire de définir des corpus représentatifs de la recherche sur le cancer dans le monde entier sans nécessairement être exhaustif dans le domaine.

Un point important à souligner est qu'avec l'utilisation d'indicateurs relatifs (normalisés), il suffit de disposer de la représentativité complète des données pour calculer ces indicateurs au niveau du pays, à condition que les erreurs ou biais possibles dans les corpus soient équivalents pour tous les pays.

Les corpus de données définis pendant ces études et utilisés pour le projet de faisabilité HELIOS couvrent la période 1999-2009.

Publications

Le corpus de publications scientifiques dans le domaine de la recherche sur le cancer se base sur les données disponibles dans la base de données de Web of Science® gérée par Thomson Reuters. En tant que base de données bibliographique sélective de plus de 11 000 revues, dont nombre des meilleures revues internationales, elle est fréquemment utilisée dans le monde entier comme source de référence pour les analyses bibliométriques internationales.

Des conseils de la part d'experts dans le domaine de la recherche sur le cancer ont été nécessaires pour définir le corpus de publications. Ces experts ont validé chaque étape du processus de construction du corpus, depuis le choix initial des mots-clés jusqu'à la vérification de l'homogénéité des agrégats de publication obtenus de manière statistique. L'étude a été menée en collaboration avec Gérard Chevalier (chef de projet, INCa), Corinne Sebastiani (chef de projet, ITMO Cancer) et Valérie Thibaudeau (coordinatrice des affaires scientifiques, INCa) et se basait sur un panel d'experts expérimentés dans le domaine, Ula Hibner (directeur de recherche, CNRS) et Catherine Cavard (chef de projet, CNRS), Vincent Levy (professeur, hôpital Avicenne, université Paris 13) et Khaled Meflah (directeur général, centre anticancéreux CLCC François Baclesse).

Le processus de sélection des publications sur le cancer a commencé par la récupération de toutes les publications de Web of Science® contenant au moins un des mots-clés de l'interrogation lexicale suivante, soit dans leur titre, soit dans leur résumé :

> cancer% OU anti-cancer% OU anticancer% OU carcino% OU adenocarcino% OU oncog% OU oncolo% OU tumor% OU tumour% OU anti-tumor% OU antitumor% OU anti-tumour% OU antitumour% OU malignan% OU neoplasia OU neoplasm% OU neoplastic OU antineoplast% OU anti-neoplast% OU antineoplasm% OU anti-neoplasm% OU leukem% OU leukaem% OU leucem% OU leucaem% OU sarcoma% OU lymphoma% OU lymphoblasti% OU melanoma% OU metastas% OU myelom% OU apoptos% OU apoptot%

où % est un caractère de remplacement.

Plus de 775 000 publications ont été récupérées dans la période 1999-2009 à l'aide de cet algorithme pour créer un corpus initial. Celui-ci comprend uniquement les articles scientifiques, les lettres, les notes, les revues et les actes de congrès, selon le classement de Thomson Reuters dans la base de données source. Les résumés de réunions n'ont par exemple pas été retenus pour l'étude car ils ne sont considérés comme pouvant être cités en termes bibliométriques.

Une méthode statistique, l'analyse par facteur de correspondance, a ensuite été utilisée pour classer les publications du corpus initial en agrégats partageant le même vocabulaire. Selon cette méthode, environ 1 000 des mots les plus fréquents dans le texte de l'ensemble du corpus (titres et résumés) ont d'abord été sélectionnés. Puis, la présence simultanée de ces mots-clés dans toutes les publications du corpus est analysée pour créer une matrice mot-publication à deux dimensions. Les mots souvent présents ensemble dans le même document sont considérés « proches » et les publications partageant le même groupe de mots-clés proches sont elles-mêmes considérées comme étant proches, ou voisines, et sont supposées contenir des informations scientifiques comparables. L'analyse du facteur de correspondance produit des facteurs (agrégats) de publications à partir d'un corpus initial de publications. Chaque agrégat est défini par le groupe de mots-clés (la méta-clé) partagé par les publications de l'agrégat et permettant de définir la proximité de ces publications.

Après avoir appliqué l'analyse du facteur de correspondance au corpus initial de publication dans le domaine du cancer, les experts ont examiné la méta-clé de chaque agrégat et un échantillon des publications les plus centrales pour décider si le contenu de cet agrégat appartenait ou pas au domaine du cancer. Certains agrégats ont été exclus du corpus selon ce critère. D'autres agrégats ont été conservés, et le contenu d'un troisième groupe d'agrégats a été évalué comme étant trop hétérogène pour décider de les inclure ou de les exclure. Ce troisième groupe d'agrégats, représentant environ 40 % du corpus intial, a été réanalysé par l'analyse du facteur de correspondance. Cette deuxième itération a permis aux experts de classer tous les agrégats résultants comme appartenant ou pas au domaine de la recherche sur le cancer.

L'association des analyses par les experts des deux traitements statistiques a permis de constituer le corpus finalisé de publications scientifiques dans le domaine du cancer. Le corpus final comprenait près de 570 000 publications scientifiques de 1999-2009.

Brevets

Le corpus de brevets constitué pour l'étude bibliométrique dans le domaine de la recherche technologique sur le cancer se basait sur le contenu de la base de données Patstat gérée par l'Office européen des brevets (OEB). Patstat contient les demandes de brevet ou les brevets accordés publiés par plus de 80 bureaux de brevet nationaux ou internationaux dans le monde. Les avis de brevet publiés par les trois principaux bureaux de brevets, l'OEB, le United States Patent and Trademark Office (USPTO) et l'Organisation mondiale de la propriété intellectuelle (OMPI), ont été retenus pour l'étude bibliométrique sur le cancer. Comme l'objectif de l'étude était de quantifier les activités inventives des principaux pays dans le domaine du cancer, les demandes de brevet auprès de l'OEB et de l'OMPI ont été utilisées car elles sont publiées de manière plus proche de l'activité de recherche que les brevets accordés résultants. Comme les demandes historiques de brevets ne sont pas disponibles pour les données de l'USPTO, ce sont les brevets accordés par ce bureau qui ont été utilisés. Ceci entraîne un délai entre les données de l'OEB et de l'OMPI, d'un côté et celles de l'USPTO de l'autre : les demandes de brevet sont publiées 18 mois après leur date de soumission initiale alors que les brevets accordés sont publiés jusqu'à 5 ans après la date de soumission.

Comme pour les publications, des conseils de la part d'experts dans le domaine des brevets sur le cancer ont été nécessaires pour définir le corpus de brevets dans le domaine de la recherche sur le cancer. L'étude a été menée en collaboration avec Gérard Chevalier (chef de projet, INCa), Corinne Sebastiani (chef de projet, ITMO Cancer), Sophie Gomez (directeur des opérations, ITMO Cancer) et Valérie Thibaudeau (coordinatrice des affaires scientifiques, INCa) et avec les conseils de Matthieu Collin (directeur adjoint de la propriété intellectuelle, Inserm-Transfert) et de Romain Val (chef de projet, INCa). Les experts ont validé tout le processus d'élaboration du corpus, depuis la sélection les mots-clés initiaux jusqu'à la vérification et l'examen des résultats et la définition du domaine.

Les experts ont confirmé qu'il n'était pas possible de constituer un corpus approprié de brevets à partir des codes de la Classification internationale des brevets (CIB) attribués à chaque brevet (un ou plusieurs codes par brevet) selon le bureau des brevets correspondant. Le regroupement des codes de la CIB basés sur la technologie ne nous permet pas de couvrir correctement un domaine d'application tel que le cancer.
Le processus de sélection des brevets en recherche sur le cancer a donc commencé par une approche textuelle. Au départ, tous les avis de brevet contenant dans le titre, le résumé ou les revendications (définissant le périmètre de l'exploitation en exclusivité) au moins un des termes suivants ont été récupérés :

> cancer% OU anti-cancer% OU anticancer% OU carcino% OU adenocarcino% OU oncog% OU oncolo% OU tumor% OU tumour% OU anti-tumor% OU antitumor% OU anti-tumour% OU antitumour% OU malignan% OU neoplasia OU neoplasm% OU neoplastic OU antineoplast% OU anti-neoplast% OU antineoplasm% OU anti-neoplasm% OU leukem% OU leukaem% OU leucem% OU leucaem% OU sarcoma% OU lymphoma% OU lymphoblasti% OU melanoma% OU metastas% OU myelom% OU sarcoma% OU glioma% OU glioblast%

où % est un caractère de remplacement.

Plus de 41 000 demandes de brevets auprès de l'OEB, 59 000 demandes de brevet auprès de l'OMPI et 27 000 brevets accordés par l'USPTO, publiés pendant la période 1999-2009 ont été récupérés avec cette interrogation.

Un jeu de référence de brevets a été utilisé pour valider ce corpus initial. Le jeu était constitué de brevets biomédicaux déposés par l'Inserm et en particulier ceux indexés à la main comme appartenant au domaine du cancer. L'association du corpus initial avec ce jeu de référence a confirmé que les brevets de référence sur le cancer étaient effectivement inclus dans le corpus initial et que tous les brevets de référence du corpus étaient effectivement des brevets relatifs au cancer. Ce test a été complété par une analyse d'expert de certaines statistiques du corpus : principaux cessionnaires, inventeurs, codes CIB et sous-classes… Sur cette base, le groupe d'experts a estimé que le corpus était représentatif de la recherche technologique mondiale dans le domaine du cancer, mesurée par les brevets.

Cette phase d'analyse a conduit les experts à définir un deuxième périmètre au sein du corpus de brevets, basé sur l'observation que lorsqu'un des termes de l'interrogation se retrouve dans le titre ou dans le résumé d'un avis de brevet, le seul ou le principal domaine d'application du brevet est le cancer. Mais quand les termes de l'interrogation se trouvent uniquement dans la partie des revendications de l'avis de brevet, le cancer est seulement un des nombreux domaines possibles d'application du brevet. Par conséquent, le cœur même de la recherche technologique sur le cancer a été défini par les brevets dont le seul ou le principal domaine d'application est le cancer.

Pour l'étude de faisabilité HELIOS, il a été décidé d'utiliser ce corpus de brevets restreint, concentré sur le cœur même de la recherche sur le cancer. Ce corpus contient environ 66 000 demandes de brevet auprès de l'OEB et de l'OMPI ou brevets accordés par l'USPTO sur le cancer publiés pendant la période 1999-2009.

F. Top Thématiques par types de cancer

0: **Adrenocortical Cancer**

4.9	[t203] steroid adrenal pcos steroids star dhea sf1 steroidogenic syndrome polycystic
4.2	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
3.3	[t346] biomarkers markers biomarker disease patients marker serum diagnostic diagnosis samples
2.6	[t172] genes gene_expression gene microarray transcripts expressed differentially_expressed transcriptional profiling profiles
2.2	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
2.1	[t225] camp pka creb cgmp cyclic phosphodiesterase di pkg protein_kinase phosphorylation
2.1	[t190] genes gene_expression transcriptional transcription_factors transcription transcription_factor promoter promoters gene binding
2.1	[t433] patients patient clinical diagnosis conclusions disease background diagnosed treated age
2.0	[t532] mutations mutation gene patients familial families missense disease syndrome hereditary
1.9	[t59] copy_number chromosomal chromosome deletion deletions genomic gene genes regions fish

2: Not Site-Specific Cancer

2.3	[t370] tumor immunotherapy t_cells t_cell immunity anti_tumor antitumor cancer antigen patients
1.9	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
1.5	[t136] dna repair dna_repair dna_damage damage excision_repair ber lesions cells ner
1.5	[t395] theory framework theoretical conceptual concept theories relationships behavior dynamic empirical
1.3	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
1.3	[t406] histone lysine acetylation chromatin methylation histone_h3 h3 h4 histones epigenetic
1.2	[t600] proteins protein complexes functions protein_protein molecular biochemical family protein_complexes cellular
1.2	[t80] radiation irradiation radiation_induced ionizing irradiated gy damage radiotherapy ir sap
1.1	[t71] dna repair recombination rad51 homologous_recombination dsbs nhej dna_repair reca double_strand_breaks

1.1 [t433] patients patient clinical diagnosis conclusions disease background diagnosed treated age

3: Bladder Cancer

5.9 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
2.9 [t582] release secretion exocytosis fusion snare secretory vesicles vesicle granules granule
2.5 [t19] patients dose mg toxicity phase_i grade median days months treatment
2.3 [t62] membrane membranes membrane_proteins proteins plasma_membrane protein transmembrane lipid_rafts membrane_protein lipid
2.3 [t590] water molecular energy charge calculations solvent electrostatic simulations force theory
2.2 [t482] folding protein proteins structure stability conformational unfolding native helix helical
2.2 [t319] bladder spinal_cord sci spinal_cord_injury spinal urinary urothelial cervical urinary_tract injury
2.2 [t16] metastasis invasion tumor metastatic progression cancer cells tumor_cells invasive tumor_cell
1.9 [t121] assembly dimer complexes dimerization dimers oligomers oligomerization monomer crosslinking monomers
1.7 [t299] functions molecular cellular cells homeostasis cell disease cancer biological pathways

4: Bone Cancer

7.9 [t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival
3.9 [t202] stem_cells regeneration cells stem_cell mesenchymal repair mscs msc bone_marrow tissue
3.7 [t23] tumor tumors tumor_growth mice tumor_cells treatment xenografts therapy xenograft cancer
3.5 [t255] bone osteoclast osteoblasts osteoblast rankl resorption osteoclasts differentiation skeletal osteoporosis
3.1 [t153] networks network biological modules module computational systems_biology integrated modeling integration
2.3 [t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
2.2 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
1.9 [t334] modeling dynamics computational simulation mathematical simulations dynamic parameters quantitative predictions
1.9 [t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets
1.7 [t172] genes gene_expression gene microarray transcripts expressed differentially_expressed transcriptional profiling profiles

6: Brain Tumor

11.5 [t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival

5.8 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
3.5 [t19] patients dose mg toxicity phase_i grade median days months treatment
2.4 [t293] vegf angiogenesis vascular_endothelial_growth_factor angiogenic endothelial_cells vascular vegfr receptor endothelial_cell neovascularization
2.1 [t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
2.1 [t126] treatment therapy patients treated efficacy therapies treatments patient therapeutic benefit
2.0 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
2.0 [t463] diagnostic diagnosis specificity tests predictive accuracy patients clinical detection curve
1.8 [t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets
1.3 [t346] biomarkers markers biomarker disease patients marker serum diagnostic diagnosis samples

7: Breast Cancer

4.0 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
3.7 [t686] cancer breast cancer_risk women cancers cancer_patients cancer_survivors treatment diagnosis diagnosed
2.8 [t182] breast cancer her2 cancer_cells human mcf7 neu cancers mda tumors
2.8 [t497] breast cancer mammography women density mammographic screening cancer_risk breast_tissue benign
2.1 [t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
1.6 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
1.5 [t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
1.5 [t19] patients dose mg toxicity phase_i grade median days months treatment
1.5 [t16] metastasis invasion tumor metastatic progression cancer cells tumor_cells invasive tumor_cell
1.4 [t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets

9: Cervical Cancer

5.4 [t577] screening colorectal_cancer cancer_screening screen screened primary_care crc_screening tests preventive colonoscopy
3.2 [t278] hpv head_and_neck human cervical papillomavirus cervical_cancer hnscc hpv16 e6 squamous_cell
3.0 [t496] dose treatment planning beam radiotherapy radiation_therapy patient imrt motion dosimetry
2.8 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
2.6 [t381] lymphatic lymph_node ln lymph_nodes sb lymph sentinel dm1 lymphedema lymphangiogenesis
2.3 [t19] patients dose mg toxicity phase_i grade median days months treatment

1.9	[t187] countries international india brazil global_health country global developing_countries public_health thailand
1.7	[t410] surgery surgical patients postoperative undergoing bypass resection complications outcomes preoperative
1.6	[t433] patients patient clinical diagnosis conclusions disease background diagnosed treated age
1.6	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
12: Esophageal / Oesophageal Cancer	
21.5	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
3.9	[t410] surgery surgical patients postoperative undergoing bypass resection complications outcomes preoperative
3.1	[t589] trial treatment placebo randomized patients baseline months trials participants randomized_controlled
2.7	[t588] esophageal esophagus barrett_s reflux ee dysplasia patients esophageal_cancer esophageal_adenocarcinoma endoscopic
2.3	[t693] quality_of_life qol health physical health_related scores hrqol functioning outcomes sf
2.1	[t19] patients dose mg toxicity phase_i grade median days months treatment
1.9	[t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
1.8	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
1.6	[t346] biomarkers markers biomarker disease patients marker serum diagnostic diagnosis samples
1.0	[t126] treatment therapy patients treated efficacy therapies treatments patient therapeutic benefit
13: Eye Cancer	
3.2	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
2.8	[t23] tumor tumors tumor_growth mice tumor_cells treatment xenografts therapy xenograft cancer
2.7	[t37] efficacy treatment preclinical animal therapeutic drug drugs toxicity phase_i compounds
2.5	[t221] mn pe pdt manganese arc light photodynamic_therapy porphyrin photosensitizer singlet_oxygen
2.1	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
1.8	[t251] mri imaging diffusion magnetic_resonance_imaging perfusion weighted t2 images mr_imaging tissue
1.6	[t669] ps phagocytosis apoptotic cells clearance paf hmgb1 cd36 phagocytic macrophages
1.6	[t19] patients dose mg toxicity phase_i grade median days months treatment
1.6	[t496] dose treatment planning beam radiotherapy radiation_therapy patient imrt motion dosimetry

1.5 [t589] trial treatment placebo randomized patients baseline months trials participants randomized_controlled

21: Head and Neck Cancer

8.1 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
6.0 [t278] hpv head_and_neck human cervical papillomavirus cervical_cancer hnscc hpv16 e6 squamous_cell
4.4 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
2.7 [t80] radiation irradiation radiation_induced ionizing irradiated gy damage radiotherapy ir sap
2.7 [t16] metastasis invasion tumor metastatic progression cancer cells tumor_cells invasive tumor_cell
2.0 [t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
1.7 [t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
1.5 [t23] tumor tumors tumor_growth mice tumor_cells treatment xenografts therapy xenograft cancer
1.4 [t11] egfr egf receptor epidermal_growth_factor erbb signaling erlotinib erbb2 inhibitors egf_receptor
1.4 [t445] melanoma tumour melanomas melanocytes tumours metastatic cpg odn cells nis

23: Liver Cancer

5.4 [t663] hcc driving hepatocellular_carcinoma ablation drivers liver_cancer rf liver driver aflatoxin
4.0 [t217] liver hepatic hepatocytes hepatocyte liver_injury liver_disease livers nash nafld nonalcoholic
3.1 [t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
2.8 [t437] risk risk_factors cohort prospective high_risk cases follow_up collected controls population
2.6 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
2.5 [t130] hcv virus hepatitis_c hbv hepatitis_b hcv_infection infected infection viral antiviral
2.4 [t589] trial treatment placebo randomized patients baseline months trials participants randomized_controlled
2.1 [t187] countries international india brazil global_health country global developing_countries public_health thailand
2.1 [t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
2.0 [t463] diagnostic diagnosis specificity tests predictive accuracy patients clinical detection curve

24: Hodgkin's Disease

9.6 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
3.6 [t32] leukemia aml acute lymphoblastic mll acute_myeloid_leukemia leukemic pml leukemias patients
3.2 [t350] lymphoma b_cell cll nhl lymphomas leukemia non_hodgkin rituximab malignancies patients
3.1 [t374] incidence cases surveillance age trends population population_based prevalence diagnosis

epidemiology
3.1 [t196] cr vi pv mds chromium mpd myelodysplastic jak2 ara caloric_restriction
2.7 [t19] patients dose mg toxicity phase_i grade median days months treatment
2.3 [t193] molecular cellular biology biochemical targets genetic therapeutic biological pathways molecules
2.3 [t30] clinical basic team expertise translational disease innovative investigators multidisciplinary biology
2.0 [t626] kinase pp2a kinases phosphorylation phosphatase protein_kinase cdk5 _14_3_3 protein pp1
2.0 [t187] countries international india brazil global_health country global developing_countries public_health thailand

25: Kidney Cancer

4.6 [t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
4.3 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
4.1 [t460] chemokine neutrophil neutrophils chemokines recruitment pmn inflammatory receptor mip ccl2
3.2 [t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival
2.9 [t138] renal kidney tubular rcc kidneys cell proximal_tubule carcinoma acute renal_failure
2.6 [t346] biomarkers markers biomarker disease patients marker serum diagnostic diagnosis samples
2.5 [t374] incidence cases surveillance age trends population population_based prevalence diagnosis epidemiology
2.3 [t23] tumor tumors tumor_growth mice tumor_cells treatment xenografts therapy xenograft cancer
2.2 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
1.7 [t233] fiber fibers gm_csf pf colony stimulating elastin granulocyte g_csf elastic

26: Laryngeal Cancer

16.3 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
2.1 [t201] ct volume computed_tomography scans chest scan volumes mm nodules imaging
1.8 [t11] egfr egf receptor epidermal_growth_factor erbb signaling erlotinib erbb2 inhibitors egf_receptor
1.6 [t19] patients dose mg toxicity phase_i grade median days months treatment
1.4 [t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
1.3 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
1.1 [t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
1.1 [t278] hpv head_and_neck human cervical papillomavirus cervical_cancer hnscc hpv16 e6 squamous_cell
1.1 [t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival
1.1 [t32] leukemia aml acute lymphoblastic mll acute_myeloid_leukemia leukemic pml leukemias patients

27: Leukemia / Leukaemia

12.4	[t32] leukemia aml acute lymphoblastic mll acute_myeloid_leukemia leukemic pml leukemias patients
5.3	[t652] transplantation gvhd allogeneic stem_cell donor patients hct disease transplant graft_versus_host
3.0	[t196] cr vi pv mds chromium mpd myelodysplastic jak2 ara caloric_restriction
2.8	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
2.5	[t370] tumor immunotherapy t_cells t_cell immunity anti_tumor antitumor cancer antigen patients
2.3	[t19] patients dose mg toxicity phase_i grade median days months treatment
2.1	[t612] bone_marrow cells hsc hematopoietic bm stem_cell hscs hematopoietic_stem_cells marrow transplantation
1.5	[t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
1.5	[t193] molecular cellular biology biochemical targets genetic therapeutic biological pathways molecules
1.5	[t59] copy_number chromosomal chromosome deletion deletions genomic gene genes regions fish

28: Lung Cancer

7.4	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
3.8	[t444] lung_cancer lung nsclc non_small_cell adenocarcinoma cancers lung_tumors cancer a549 tumor
2.5	[t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
2.4	[t16] metastasis invasion tumor metastatic progression cancer cells tumor_cells invasive tumor_cell
2.2	[t19] patients dose mg toxicity phase_i grade median days months treatment
2.0	[t346] biomarkers markers biomarker disease patients marker serum diagnostic diagnosis samples
1.7	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
1.7	[t23] tumor tumors tumor_growth mice tumor_cells treatment xenografts therapy xenograft cancer
1.6	[t370] tumor immunotherapy t_cells t_cell immunity anti_tumor antitumor cancer antigen patients
1.5	[t187] countries international india brazil global_health country global developing_countries public_health thailand

29: Melanoma

6.9	[t445] melanoma tumour melanomas melanocytes tumours metastatic cpg odn cells nis
3.5	[t19] patients dose mg toxicity phase_i grade median days months treatment
2.7	[t140] integrin integrins fibronectin beta1 iv laminin ecm extracellular_matrix adhesion fn
2.7	[t394] t_cell cd8 cd4 cd8_t_cells memory t_cells cd4_t_cells effector cells naive
2.1	[t23] tumor tumors tumor_growth mice tumor_cells treatment xenografts therapy xenograft cancer
2.1	[t289] ras raf nf1 k_ras braf oncogenic mek erk pathway mutations

2.0 [t642] antigen tcr mhc presentation class mhc_class_i nkt_cells molecules antigens t_cells
1.8 [t370] tumor immunotherapy t_cells t_cell immunity anti_tumor antitumor cancer antigen patients
1.7 [t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
1.7 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies

30: **Myeloma**

9.8 [t585] mm multiple_myeloma hgf myeloma survivin bortezomib cmet hepatocyte_growth_factor thalidomide patients
3.7 [t433] patients patient clinical diagnosis conclusions disease background diagnosed treated age
3.4 [t126] treatment therapy patients treated efficacy therapies treatments patient therapeutic benefit
3.3 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
3.2 [t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets
2.8 [t612] bone_marrow cells hsc hematopoietic bm stem_cell hscs hematopoietic_stem_cells marrow transplantation
2.4 [t196] cr vi pv mds chromium mpd myelodysplastic jak2 ara caloric_restriction
2.2 [t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
1.9 [t19] patients dose mg toxicity phase_i grade median days months treatment
1.9 [t589] trial treatment placebo randomized patients baseline months trials participants randomized_controlled

32 :**Neuroblastoma**

4.3 [t16] metastasis invasion tumor metastatic progression cancer cells tumor_cells invasive tumor_cell
3.4 [t350] lymphoma b_cell cll nhl lymphomas leukemia non_hodgkin rituximab malignancies patients
3.0 [t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival
2.7 [t532] mutations mutation gene patients familial families missense disease syndrome hereditary
2.6 [t173] genetic genes risk susceptibility polymorphisms genetics disease gene_environment etiology gene
2.5 [t374] incidence cases surveillance age trends population population_based prevalence diagnosis epidemiology
2.4 [t59] copy_number chromosomal chromosome deletion deletions genomic gene genes regions fish
2.2 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
1.9 [t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
1.7 [t30] clinical basic team expertise translational disease innovative investigators multidisciplinary biology

33: **Nervous System**

12.1	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
3.3	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
2.9	[t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival
2.4	[t589] trial treatment placebo randomized patients baseline months trials participants randomized_controlled
2.3	[t20] children pediatric age childhood child adults adolescents young_children months adult
2.0	[t166] criteria guidelines consensus recommendations definition american national definitions met recommended
1.6	[t19] patients dose mg toxicity phase_i grade median days months treatment
1.5	[t652] transplantation gvhd allogeneic stem_cell donor patients hct disease transplant graft_versus_host
1.4	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
1.4	[t317] survival patients stage prognostic recurrence outcome prognosis disease poor status

35: Non-Hodgkin's Lymphoma

11.2	[t350] lymphoma b_cell cll nhl lymphomas leukemia non_hodgkin rituximab malignancies patients
4.2	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
2.6	[t19] patients dose mg toxicity phase_i grade median days months treatment
2.4	[t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets
2.3	[t123] b_cell b_cells bcr cd40 cells antigen baff receptor b_lymphocytes germinal
1.8	[t44] tissue tissues specimens sections staining pathology samples fixed immunohistochemistry histology
1.8	[t652] transplantation gvhd allogeneic stem_cell donor patients hct disease transplant graft_versus_host
1.8	[t126] treatment therapy patients treated efficacy therapies treatments patient therapeutic benefit
1.7	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
1.6	[t187] countries international india brazil global_health country global developing_countries public_health thailand

36: **Oral Cavity and Lip Cancer**

17.3	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
3.4	[t410] surgery surgical patients postoperative undergoing bypass resection complications outcomes preoperative
2.8	[t126] treatment therapy patients treated efficacy therapies treatments patient therapeutic benefit
2.6	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies

2.3 [t278] hpv head_and_neck human cervical papillomavirus cervical_cancer hnscc hpv16 e6 squamous_cell
2.1 [t589] trial treatment placebo randomized patients baseline months trials participants randomized_controlled
2.0 [t592] oral saliva salivary oral_cancer salivary_gland tongue ls swallowing oral_cavity streptococcus
2.0 [t11] egfr egf receptor epidermal_growth_factor erbb signaling erlotinib erbb2 inhibitors egf_receptor
1.6 [t16] metastasis invasion tumor metastatic progression cancer cells tumor_cells invasive tumor_cell
1.6 [t346] biomarkers markers biomarker disease patients marker serum diagnostic diagnosis samples

37: **Pancreatic Cancer**

4.0 [t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
3.2 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
2.5 [t72] labeling quantitative labeled mass_spectrometry metabolites quantification metabolomics isotope ms biological
2.3 [t619] disease pathogenesis progression molecular animal patients therapeutic treatment therapies human
2.2 [t23] tumor tumors tumor_growth mice tumor_cells treatment xenografts therapy xenograft cancer
2.1 [t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets
2.1 [t393] metabolic metabolism dehydrogenase glucose lactate pyruvate flux glutamine glycolysis enzyme
2.0 [t395] theory framework theoretical conceptual concept theories relationships behavior dynamic empirical
1.9 [t488] center biomedical resource technologies genomics computational technology biology resources national
1.6 [t19] patients dose mg toxicity phase_i grade median days months treatment

42: Prostate Cancer

4.6 [t342] prostate cancer psa antigen prostate_specific prostatic prostatectomy radical biopsy gleason
3.4 [t660] prostate cancer pca cancer_cells lncap androgen progression human pc prostatic
3.3 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
3.0 [t496] dose treatment planning beam radiotherapy radiation_therapy patient imrt motion dosimetry
2.6 [t686] cancer breast cancer_risk women cancers cancer_patients cancer_survivors treatment diagnosis diagnosed
2.6 [t493] catheter procedures surgical needle guided procedure guidance minimally_invasive image_guided ablation

2.4 [t463] diagnostic diagnosis specificity tests predictive accuracy patients clinical detection curve
2.3 [t251] mri imaging diffusion magnetic_resonance_imaging perfusion weighted t2 images mr_imaging tissue
2.3 [t577] screening colorectal_cancer cancer_screening screen screened primary_care crc_screening tests preventive colonoscopy
1.6 [t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular

48: **Sarcoma, Soft Tissue**

8.1 [t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival
6.6 [t19] patients dose mg toxicity phase_i grade median days months treatment
3.3 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
2.9 [t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
2.7 [t496] dose treatment planning beam radiotherapy radiation_therapy patient imrt motion dosimetry
2.6 [t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets
2.5 [t59] copy_number chromosomal chromosome deletion deletions genomic gene genes regions fish
2.5 [t252] treatment patients management patient outcomes clinical medical care clinicians decisions
1.8 [t445] melanoma tumour melanomas melanocytes tumours metastatic cpg odn cells nis
1.7 [t44] tissue tissues specimens sections staining pathology samples fixed immunohistochemistry histology

50: Small Intestine Cancer

4.0 [t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
3.2 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
2.5 [t72] labeling quantitative labeled mass_spectrometry metabolites quantification metabolomics isotope ms biological
2.3 [t619] disease pathogenesis progression molecular animal patients therapeutic treatment therapies human
2.2 [t23] tumor tumors tumor_growth mice tumor_cells treatment xenografts therapy xenograft cancer
2.1 [t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets
2.1 [t393] metabolic metabolism dehydrogenase glucose lactate pyruvate flux glutamine glycolysis enzyme
2.0 [t395] theory framework theoretical conceptual concept theories relationships behavior dynamic empirical
1.9 [t488] center biomedical resource technologies genomics computational technology biology resources national

1.6 [t19] patients dose mg toxicity phase_i grade median days months treatment

51: Stomach Cancer

3.8 [t152] imatinib bcr_abl cml kit im stone chronic oxalate patients tyrosine_kinase
3.3 [t437] risk risk_factors cohort prospective high_risk cases follow_up collected controls population
3.2 [t23] tumor tumors tumor_growth mice tumor_cells treatment xenografts therapy xenograft cancer
2.8 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
2.5 [t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
2.4 [t532] mutations mutation gene patients familial families missense disease syndrome hereditary
2.2 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
2.1 [t445] melanoma tumour melanomas melanocytes tumours metastatic cpg odn cells nis
2.0 [t346] biomarkers markers biomarker disease patients marker serum diagnostic diagnosis samples
1.9 [t44] tissue tissues specimens sections staining pathology samples fixed immunohistochemistry histology

52: Testicular Cancer

9.4 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
4.9 [t19] patients dose mg toxicity phase_i grade median days months treatment
2.6 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
2.4 [t353] subjects treatment placebo weeks safety mg week dose efficacy randomized
1.9 [t133] cisplatin paclitaxel drugs synergistic chemotherapy drug treatment agents cpt anticancer
1.6 [t652] transplantation gvhd allogeneic stem_cell donor patients hct disease transplant graft_versus_host
1.4 [t411] mmr res biol page mismatch_repair mlh1 chem msh2 med phs
1.4 [t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
1.3 [t480] therapeutic agents treatment therapies targets targeting therapy drugs inhibitors clinical_trials
1.2 [t420] variability correlation correlated variation correlations measured measures positively index correlates

54: **Thyroid Cancer**

4.6 [t442] thyroid fine tip thyroid_cancer ret tuning ptc needle ao aspiration
3.2 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
3.1 [t23] tumor tumors tumor_growth mice tumor_cells treatment xenografts therapy xenograft cancer
3.1 [t445] melanoma tumour melanomas melanocytes tumours metastatic cpg odn cells nis
2.6 [t463] diagnostic diagnosis specificity tests predictive accuracy patients clinical detection curve
2.3 [t80] radiation irradiation radiation_induced ionizing irradiated gy damage radiotherapy ir sap

1.9 [t126] treatment therapy patients treated efficacy therapies treatments patient therapeutic benefit
1.7 [t575] costs cost medicare cost_effectiveness healthcare medicaid coverage insurance claims care
1.7 [t504] adenovirus ad vectors vector adenoviral oncolytic virus ad5 gene_therapy replication
1.6 [t549] assay detection pcr assays samples amplification dna sensitive detect sample

61: **Pharyngeal Cancer**

14.6 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
6.0 [t278] hpv head_and_neck human cervical papillomavirus cervical_cancer hnscc hpv16 e6 squamous_cell
3.5 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
2.9 [t410] surgery surgical patients postoperative undergoing bypass resection complications outcomes preoperative
2.3 [t126] treatment therapy patients treated efficacy therapies treatments patient therapeutic benefit
2.3 [t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
1.7 [t589] trial treatment placebo randomized patients baseline months trials participants randomized_controlled
1.7 [t592] oral saliva salivary oral_cancer salivary_gland tongue ls swallowing oral_cavity streptococcus
1.7 [t11] egfr egf receptor epidermal_growth_factor erbb signaling erlotinib erbb2 inhibitors egf_receptor
1.5 [t346] biomarkers markers biomarker disease patients marker serum diagnostic diagnosis samples

64: **Colon and Rectal Cancer**

5.1 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
4.1 [t447] colorectal_cancer colon_cancer colon crc colorectal apc colonic adenomas polyps adenoma
2.8 [t577] screening colorectal_cancer cancer_screening screen screened primary_care crc_screening tests preventive colonoscopy
2.5 [t532] mutations mutation gene patients familial families missense disease syndrome hereditary
2.1 [t19] patients dose mg toxicity phase_i grade median days months treatment
2.1 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
2.0 [t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
1.8 [t463] diagnostic diagnosis specificity tests predictive accuracy patients clinical detection curve
1.7 [t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
1.5 [t549] assay detection pcr assays samples amplification dna sensitive detect sample

66: **Ovarian Cancer**

7.0 [t370] tumor immunotherapy t_cells t_cell immunity anti_tumor antitumor cancer antigen patients

3.3 [t269] treg_cells treg cd4 foxp3 cd25 cells tregs il2 t_cells t_cell
2.9 [t596] ifn_gamma cells il th1 il4 th2 cytokine il12 il17 cytokines
2.7 [t348] nk_cells nk_cell nk natural_killer cells kir il15 receptors nkg2d receptor
2.5 [t532] mutations mutation gene patients familial families missense disease syndrome hereditary
2.3 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
2.3 [t595] ovarian_cancer ovarian endometrial_cancer endometrial epithelial carcinoma peritoneal cancers mesothelioma serous
2.1 [t38] dc dcs dendritic_cells dendritic_cell maturation cells t_cell pdc antigen plasmacytoid
1.8 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
1.8 [t608] qualitative interviews experiences cultural social participants religious experience barriers quantitative

67: Blood Cancer

5.7 [t652] transplantation gvhd allogeneic stem_cell donor patients hct disease transplant graft_versus_host
4.1 [t612] bone_marrow cells hsc hematopoietic bm stem_cell hscs hematopoietic_stem_cells marrow transplantation
4.1 [t196] cr vi pv mds chromium mpd myelodysplastic jak2 ara caloric_restriction
3.7 [t32] leukemia aml acute lymphoblastic mll acute_myeloid_leukemia leukemic pml leukemias patients
2.3 [t252] treatment patients management patient outcomes clinical medical care clinicians decisions
2.3 [t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
1.7 [t257] sepsis patients intensive acute icu unit care mortality critically_ill ventilation
1.7 [t348] nk_cells nk_cell nk natural_killer cells kir il15 receptors nkg2d receptor
1.6 [t686] cancer breast cancer_risk women cancers cancer_patients cancer_survivors treatment diagnosis diagnosed
1.6 [t19] patients dose mg toxicity phase_i grade median days months treatment

103: Anal Cancer

5.6 [t278] hpv head_and_neck human cervical papillomavirus cervical_cancer hnscc hpv16 e6 squamous_cell
4.1 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
3.4 [t19] patients dose mg toxicity phase_i grade median days months treatment
3.2 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
2.1 [t16] metastasis invasion tumor metastatic progression cancer cells tumor_cells invasive tumor_cell
1.9 [t589] trial treatment placebo randomized patients baseline months trials participants

	randomized_controlled
1.9	[t569] infectious disease agents pathogens biodefense agent pathogen smallpox vaccinia category
1.5	[t11] egfr egf receptor epidermal_growth_factor erbb signaling erlotinib erbb2 inhibitors egf_receptor
1.4	[t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
1.3	[t133] cisplatin paclitaxel drugs synergistic chemotherapy drug treatment agents cpt anticancer

G. Top Thématiques par catégories CSO

1.1 Normal Functioning

3.2	[t32] leukemia aml acute lymphoblastic mll acute_myeloid_leukemia leukemic pml leukemias patients
3.1	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
2.8	[t260] signaling signals pathways signaling_pathways molecular signal_transduction signal receptor receptors targets
2.3	[t71] dna repair recombination rad51 homologous_recombination dsbs nhej dna_repair reca double_strand_breaks
2.0	[t525] imaging microscopy cells living fluorescent fret dynamics fluorescence single_molecule molecular
1.9	[t612] bone_marrow cells hsc hematopoietic bm stem_cell hscs hematopoietic_stem_cells marrow transplantation
1.9	[t672] trans ra cis retinoic_acid vitamin_a transfer retinoid vitamin_e retinol tocopherol
1.8	[t482] folding protein proteins structure stability conformational unfolding native helix helical
1.7	[t224] p53 mdm2 arf apoptosis tumor_suppressor p16 p63 p21 p53_dependent p73
1.7	[t196] cr vi pv mds chromium mpd myelodysplastic jak2 ara caloric_restriction

1.2 Cancer Initiation: Alterations in Chromosomes

4.8	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
3.7	[t136] dna repair dna_repair dna_damage damage excision_repair ber lesions cells ner
3.0	[t406] histone lysine acetylation chromatin methylation histone_h3 h3 h4 histones epigenetic
2.7	[t71] dna repair recombination rad51 homologous_recombination dsbs nhej dna_repair reca double_strand_breaks
2.5	[t275] genes mutations genetic gene molecular human mutants defects disease screen
2.1	[t32] leukemia aml acute lymphoblastic mll acute_myeloid_leukemia leukemic pml leukemias patients
2.1	[t525] imaging microscopy cells living fluorescent fret dynamics fluorescence single_molecule molecular
1.9	[t322] integration elements phage insertion transposon element dna genome transfer lambda
1.7	[t59] copy_number chromosomal chromosome deletion deletions genomic gene genes regions fish
1.5	[t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival

1.3 Cancer Initiation: Oncogenes and Tumor Suppressor Genes

4.5	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
4.0	[t32] leukemia aml acute lymphoblastic mll acute_myeloid_leukemia leukemic pml leukemias patients
2.1	[t612] bone_marrow cells hsc hematopoietic bm stem_cell hscs hematopoietic_stem_cells marrow transplantation
1.9	[t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival

1.9 [t16] metastasis invasion tumor metastatic progression cancer cells tumor_cells invasive tumor_cell
1.8 [t193] molecular cellular biology biochemical targets genetic therapeutic biological pathways molecules
1.7 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
1.7 [t445] melanoma tumour melanomas melanocytes tumours metastatic cpg odn cells nis
1.6 [t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets
1.5 [t480] therapeutic agents treatment therapies targets targeting therapy drugs inhibitors clinical_trials

1.4 Cancer Progression and Metastasis

3.6 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
3.1 [t370] tumor immunotherapy t_cells t_cell immunity anti_tumor antitumor cancer antigen patients
3.0 [t16] metastasis invasion tumor metastatic progression cancer cells tumor_cells invasive tumor_cell
2.9 [t32] leukemia aml acute lymphoblastic mll acute_myeloid_leukemia leukemic pml leukemias patients
2.1 [t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
1.9 [t23] tumor tumors tumor_growth mice tumor_cells treatment xenografts therapy xenograft cancer
1.7 [t193] molecular cellular biology biochemical targets genetic therapeutic biological pathways molecules
1.7 [t445] melanoma tumour melanomas melanocytes tumours metastatic cpg odn cells nis
1.6 [t293] vegf angiogenesis vascular_endothelial_growth_factor angiogenic endothelial_cells vascular vegfr receptor endothelial_cell neovascularization
1.5 [t317] survival patients stage prognostic recurrence outcome prognosis disease poor status

1**.5 Resources and infrastructures**

7.8 [t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival
3.5 [t585] mm multiple_myeloma hgf myeloma survivin bortezomib cmet hepatocyte_growth_factor thalidomide patients
3.1 [t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets
2.9 [t153] networks network biological modules module computational systems_biology integrated modeling integration
2.4 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
2.1 [t16] metastasis invasion tumor metastatic progression cancer cells tumor_cells invasive tumor_cell
2.1 [t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
2.0 [t570] differentiation cells stem_cells stem_cell lineage progenitors progenitor_cells fate cell proliferation
1.9 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
1.8 [t433] patients patient clinical diagnosis conclusions disease background diagnosed treated age

2.1 Exogenous Factors in the Origin and Cause of Cancer

3.8	[t130] hcv virus hepatitis_c hbv hepatitis_b hcv_infection infected infection viral antiviral
2.3	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
2.3	[t616] intervention care months participants program usual follow_up trial management self_management
1.8	[t358] methamphetamine cocaine users marijuana abuse cannabis drug_abuse meth drug dependence
1.8	[t577] screening colorectal_cancer cancer_screening screen screened primary_care crc_screening tests preventive colonoscopy
1.8	[t101] fact nature find view thought body appears issue true natural
1.6	[t217] liver hepatic hepatocytes hepatocyte liver_injury liver_disease livers nash nafld nonalcoholic
1.6	[t437] risk risk_factors cohort prospective high_risk cases follow_up collected controls population
1.5	[t219] drinking alcohol college alcohol_use students heavy problems drinkers alcohol_related consumption
1.5	[t252] treatment patients management patient outcomes clinical medical care clinicians decisions
2.2 Endogenous Factors in the Origin and Cause of Cancer	
5.1	[t532] mutations mutation gene patients familial families missense disease syndrome hereditary
4.9	[t59] copy_number chromosomal chromosome deletion deletions genomic gene genes regions fish
3.6	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
3.4	[t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets
2.9	[t32] leukemia aml acute lymphoblastic mll acute_myeloid_leukemia leukemic pml leukemias patients
2.6	[t30] clinical basic team expertise translational disease innovative investigators multidisciplinary biology
2.3	[t182] breast cancer her2 cancer_cells human mcf7 neu cancers mda tumors
2.0	[t447] colorectal_cancer colon_cancer colon crc colorectal apc colonic adenomas polyps adenoma
1.9	[t433] patients patient clinical diagnosis conclusions disease background diagnosed treated age
1.9	[t217] liver hepatic hepatocytes hepatocyte liver_injury liver_disease livers nash nafld nonalcoholic
2.3 Interactions of Genes and/or Genetic Polymorphisms with Exogenous and/or Endogenous Factors	
4.8	[t544] snps snp genome_wide_association cases genes controls genotyping variants loci genome_wide
4.1	[t437] risk risk_factors cohort prospective high_risk cases follow_up collected controls population
3.3	[t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival
3.1	[t136] dna repair dna_repair dna_damage damage excision_repair ber lesions cells ner
2.8	[t433] patients patient clinical diagnosis conclusions disease background diagnosed treated age
2.4	[t585] mm multiple_myeloma hgf myeloma survivin bortezomib cmet hepatocyte_growth_factor thalidomide patients
2.2	[t189] genetic twin pairs twins familial siblings sibling relatives heritability shared
2.0	[t374] incidence cases surveillance age trends population population_based prevalence diagnosis epidemiology

1.9 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
1.8 [t252] treatment patients management patient outcomes clinical medical care clinicians decisions

3.1 Interventions to Prevent Cancer: Personal Behaviors that Affect Cancer Risk

3.8 [t200] alcohol dependence consumption alcoholism alcohol_use drinking abuse alcoholic alcoholics alcohol_related
3.7 [t511] adolescents adolescent youth substance_use behaviors risk adolescence youths prevention behavior
3.3 [t616] intervention care months participants program usual follow_up trial management self_management
2.9 [t627] prevalence survey age sample participants national conclusions regression self_reported status
2.5 [t577] screening colorectal_cancer cancer_screening screen screened primary_care crc_screening tests preventive colonoscopy
2.4 [t608] qualitative interviews experiences cultural social participants religious experience barriers quantitative
2.3 [t532] mutations mutation gene patients familial families missense disease syndrome hereditary
1.8 [t433] patients patient clinical diagnosis conclusions disease background diagnosed treated age
1.8 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
1.8 [t252] treatment patients management patient outcomes clinical medical care clinicians decisions

3.5 Complementary and Alternative Prevention Approaches

4.1 [t589] trial treatment placebo randomized patients baseline months trials participants randomized_controlled
3.3 [t663] hcc driving hepatocellular_carcinoma ablation drivers liver_cancer rf liver driver aflatoxin
3.2 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
3.1 [t437] risk risk_factors cohort prospective high_risk cases follow_up collected controls population
2.9 [t433] patients patient clinical diagnosis conclusions disease background diagnosed treated age
2.5 [t217] liver hepatic hepatocytes hepatocyte liver_injury liver_disease livers nash nafld nonalcoholic
2.4 [t323] mortality risk death ci incident hazard follow_up confidence baseline ratio
2.2 [t19] patients dose mg toxicity phase_i grade median days months treatment
1.6 [t337] network consortium recruitment center centers clinical_research multicenter patients clinical_trials collaborative
1.4 [t187] countries international india brazil global_health country global developing_countries public_health thailand

4.1 Technology Development and/or Marker Discovery

3.2 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
3.0 [t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
2.9 [t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets
2.9 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
2.9 [t346] biomarkers markers biomarker disease patients marker serum diagnostic diagnosis samples

2.4	[t350] lymphoma b_cell cll nhl lymphomas leukemia non_hodgkin rituximab malignancies patients
2.0	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
1.7	[t32] leukemia aml acute lymphoblastic mll acute_myeloid_leukemia leukemic pml leukemias patients
1.6	[t585] mm multiple_myeloma hgf myeloma survivin bortezomib cmet hepatocyte_growth_factor thalidomide patients
1.6	[t187] countries international india brazil global_health country global developing_countries public_health thailand
4.2 Technology and/or Marker Evaluation with Respect to Fundamental Parameters of Method	
4.4	[t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets
3.8	[t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
3.6	[t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival
3.2	[t346] biomarkers markers biomarker disease patients marker serum diagnostic diagnosis samples
2.7	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
2.5	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
2.0	[t549] assay detection pcr assays samples amplification dna sensitive detect sample
2.0	[t350] lymphoma b_cell cll nhl lymphomas leukemia non_hodgkin rituximab malignancies patients
1.8	[t480] therapeutic agents treatment therapies targets targeting therapy drugs inhibitors clinical_trials
1.5	[t44] tissue tissues specimens sections staining pathology samples fixed immunohistochemistry histology
4.3 Technology and/or Marker Testing in a Clinical Setting	
5.4	[t463] diagnostic diagnosis specificity tests predictive accuracy patients clinical detection curve
3.6	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
3.5	[t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
2.5	[t44] tissue tissues specimens sections staining pathology samples fixed immunohistochemistry histology
1.9	[t251] mri imaging diffusion magnetic_resonance_imaging perfusion weighted t2 images mr_imaging tissue
1.9	[t360] lesions lesion carcinoma tumors cases benign malignant invasive tumor in_situ
1.9	[t126] treatment therapy patients treated efficacy therapies treatments patient therapeutic benefit
1.8	[t19] patients dose mg toxicity phase_i grade median days months treatment
1.6	[t346] biomarkers markers biomarker disease patients marker serum diagnostic diagnosis samples
1.5	[t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival
4.4 Resources and Infrastructure Related to Detection, Diagnosis, or Prognosis	
4.3	[t585] mm multiple_myeloma hgf myeloma survivin bortezomib cmet hepatocyte_growth_factor thalidomide patients
2.6	[t577] screening colorectal_cancer cancer_screening screen screened primary_care crc_screening tests preventive colonoscopy

2.4	[t647] cells cxcr4 stem_cells population stem_cell markers cancer_stem_cells sdf1 cxcl12 stem
2.4	[t350] lymphoma b_cell cll nhl lymphomas leukemia non_hodgkin rituximab malignancies patients
2.3	[t123] b_cell b_cells bcr cd40 cells antigen baff receptor b_lymphocytes germinal
2.3	[t182] breast cancer her2 cancer_cells human mcf7 neu cancers mda tumors
2.2	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
2.1	[t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival
1.9	[t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets
1.9	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
5.1 Localized Therapies - Discovery and Development	
3.8	[t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival
3.5	[t23] tumor tumors tumor_growth mice tumor_cells treatment xenografts therapy xenograft cancer
3.1	[t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets
2.5	[t445] melanoma tumour melanomas melanocytes tumours metastatic cpg odn cells nis
2.0	[t202] stem_cells regeneration cells stem_cell mesenchymal repair mscs msc bone_marrow tissue
2.0	[t37] efficacy treatment preclinical animal therapeutic drug drugs toxicity phase_i compounds
1.9	[t80] radiation irradiation radiation_induced ionizing irradiated gy damage radiotherapy ir sap
1.9	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
1.8	[t221] mn pe pdt manganese arc light photodynamic_therapy porphyrin photosensitizer singlet_oxygen
1.8	[t104] labeled biotin conjugates tumor targeting imaging conjugate uptake radiolabeled conjugated
5.2 Localized Therapies - Clinical Applications	
10.5	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
6.6	[t496] dose treatment planning beam radiotherapy radiation_therapy patient imrt motion dosimetry
4.7	[t410] surgery surgical patients postoperative undergoing bypass resection complications outcomes preoperative
3.8	[t589] trial treatment placebo randomized patients baseline months trials participants randomized_controlled
2.5	[t381] lymphatic lymph_node ln lymph_nodes sb lymph sentinel dm1 lymphedema lymphangiogenesis
2.3	[t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
2.3	[t652] transplantation gvhd allogeneic stem_cell donor patients hct disease transplant graft_versus_host
1.8	[t19] patients dose mg toxicity phase_i grade median days months treatment
1.8	[t493] catheter procedures surgical needle guided procedure guidance minimally_invasive image_guided ablation
1.8	[t446] systematic meta_analysis published search trials articles included reports publication conclusions

5.3 Systemic Therapies - Discovery and Development

5.1	[t370] tumor immunotherapy t_cells t_cell immunity anti_tumor antitumor cancer antigen patients
3.9	[t32] leukemia aml acute lymphoblastic mll acute_myeloid_leukemia leukemic pml leukemias patients
3.1	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
2.1	[t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival
2.0	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
1.8	[t445] melanoma tumour melanomas melanocytes tumours metastatic cpg odn cells nis
1.8	[t30] clinical basic team expertise translational disease innovative investigators multidisciplinary biology
1.5	[t193] molecular cellular biology biochemical targets genetic therapeutic biological pathways molecules
1.5	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
1.4	[t652] transplantation gvhd allogeneic stem_cell donor patients hct disease transplant graft_versus_host

5.4 Systemic Therapies - Clinical Applications

9.1	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
8.1	[t19] patients dose mg toxicity phase_i grade median days months treatment
4.3	[t589] trial treatment placebo randomized patients baseline months trials participants randomized_controlled
3.2	[t126] treatment therapy patients treated efficacy therapies treatments patient therapeutic benefit
3.0	[t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
2.4	[t652] transplantation gvhd allogeneic stem_cell donor patients hct disease transplant graft_versus_host
2.0	[t353] subjects treatment placebo weeks safety mg week dose efficacy randomized
2.0	[t350] lymphoma b_cell cll nhl lymphomas leukemia non_hodgkin rituximab malignancies patients
1.5	[t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival
1.4	[t166] criteria guidelines consensus recommendations definition american national definitions met recommended

5.5 Combinations of Localized and Systemic Therapies

19.6	[t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
7.6	[t19] patients dose mg toxicity phase_i grade median days months treatment
3.6	[t589] trial treatment placebo randomized patients baseline months trials participants randomized_controlled
2.9	[t652] transplantation gvhd allogeneic stem_cell donor patients hct disease transplant graft_versus_host
1.8	[t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival
1.6	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
1.4	[t104] labeled biotin conjugates tumor targeting imaging conjugate uptake radiolabeled conjugated

1.4 [t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
1.4 [t201] ct volume computed_tomography scans chest scan volumes mm nodules imaging
1.3 [t350] lymphoma b_cell cll nhl lymphomas leukemia non_hodgkin rituximab malignancies patients

5.6 Complementary and Alternative Treatment Approaches

8.2 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
4.0 [t689] food dietary intake diet nutrition consumption foods intakes nutritional fat
2.2 [t433] patients patient clinical diagnosis conclusions disease background diagnosed treated age
1.9 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
1.8 [t107] ampk energy deprivation nutrient protein amino_acid amp lkb1 amino_acids protein_kinase
1.7 [t126] treatment therapy patients treated efficacy therapies treatments patient therapeutic benefit
1.6 [t19] patients dose mg toxicity phase_i grade median days months treatment
1.5 [t392] hospital patients care hospitals outcomes patient discharge hospitalization hospitalized inpatient
1.4 [t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
1.2 [t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular

5.7 Resources and Infrastructure Related to Treatment

6.5 [t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
3.7 [t187] countries international india brazil global_health country global developing_countries public_health thailand
2.9 [t497] breast cancer mammography women density mammographic screening cancer_risk breast_tissue benign
2.6 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
2.4 [t193] molecular cellular biology biochemical targets genetic therapeutic biological pathways molecules
2.0 [t570] differentiation cells stem_cells stem_cell lineage progenitors progenitor_cells fate cell proliferation
1.9 [t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets
1.8 [t663] hcc driving hepatocellular_carcinoma ablation drivers liver_cancer rf liver driver aflatoxin
1.4 [t44] tissue tissues specimens sections staining pathology samples fixed immunohistochemistry histology
1.3 [t161] tolerance cp hybrid bc es rh cerebral_palsy tolerant hybrids imp

6.1 Patient Care and Survivorship Issues

3.6 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
3.4 [t686] cancer breast cancer_risk women cancers cancer_patients cancer_survivors treatment diagnosis diagnosed
3.1 [t252] treatment patients management patient outcomes clinical medical care clinicians decisions
3.1 [t693] quality_of_life qol health physical health_related scores hrqol functioning outcomes sf

2.7	[t265] psychological psychosocial distress coping social_support social well_being functioning perceived variables
2.6	[t589] trial treatment placebo randomized patients baseline months trials participants randomized_controlled
2.5	[t437] risk risk_factors cohort prospective high_risk cases follow_up collected controls population
1.8	[t521] deficits cognitive behavioral impairment neurocognitive cognition impairments attention measures neurobehavioral
1.7	[t381] lymphatic lymph_node ln lymph_nodes sb lymph sentinel dm1 lymphedema lymphangiogenesis
1.7	[t496] dose treatment planning beam radiotherapy radiation_therapy patient imrt motion dosimetry

6.2 Surveillance

6.7	[t437] risk risk_factors cohort prospective high_risk cases follow_up collected controls population
3.7	[t497] breast cancer mammography women density mammographic screening cancer_risk breast_tissue benign
3.6	[t350] lymphoma b_cell cll nhl lymphomas leukemia non_hodgkin rituximab malignancies patients
3.4	[t532] mutations mutation gene patients familial families missense disease syndrome hereditary
3.4	[t374] incidence cases surveillance age trends population population_based prevalence diagnosis epidemiology
3.0	[t187] countries international india brazil global_health country global developing_countries public_health thailand
2.8	[t686] cancer breast cancer_risk women cancers cancer_patients cancer_survivors treatment diagnosis diagnosed
2.7	[t447] colorectal_cancer colon_cancer colon crc colorectal apc colonic adenomas polyps adenoma
2.0	[t577] screening colorectal_cancer cancer_screening screen screened primary_care crc_screening tests preventive colonoscopy
1.7	[t581] risk ci odds confidence ratio interval cases controls adjusted rr

6.3 Behavior

4.7	[t577] screening colorectal_cancer cancer_screening screen screened primary_care crc_screening tests preventive colonoscopy
3.3	[t613] status health socioeconomic ses social education income discrimination disparities poor
2.7	[t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
2.6	[t511] adolescents adolescent youth substance_use behaviors risk adolescence youths prevention behavior
2.3	[t187] countries international india brazil global_health country global developing_countries public_health thailand
2.3	[t608] qualitative interviews experiences cultural social participants religious experience barriers quantitative
2.3	[t627] prevalence survey age sample participants national conclusions regression self_reported status
2.3	[t200] alcohol dependence consumption alcoholism alcohol_use drinking abuse alcoholic alcoholics alcohol_related
2.3	[t374] incidence cases surveillance age trends population population_based prevalence diagnosis epidemiology
2.2	[t443] perceived attitudes survey participants beliefs perceptions barriers respondents participation preferences

6.4 Cost Analyses and Health Care Delivery

4.8	[t575] costs cost medicare cost_effectiveness healthcare medicaid coverage insurance claims care

4.5 [t252] treatment patients management patient outcomes clinical medical care clinicians decisions
3.4 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
3.2 [t463] diagnostic diagnosis specificity tests predictive accuracy patients clinical detection curve
2.8 [t621] glioma tumors tumor brain glioblastoma malignant gliomas gbm sarcoma survival
2.4 [t126] treatment therapy patients treated efficacy therapies treatments patient therapeutic benefit
2.2 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
2.2 [t381] lymphatic lymph_node ln lymph_nodes sb lymph sentinel dm1 lymphedema lymphangiogenesis
2.2 [t44] tissue tissues specimens sections staining pathology samples fixed immunohistochemistry histology
2.2 [t493] catheter procedures surgical needle guided procedure guidance minimally_invasive image_guided ablation

6.5 Education and Communication

6.8 [t395] theory framework theoretical conceptual concept theories relationships behavior dynamic empirical
5.8 [t155] patients patient physicians care primary_care physician ed visits providers medical
4.4 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
1.6 [t19] patients dose mg toxicity phase_i grade median days months treatment
1.5 [t181] disease disorders neurodegenerative neurological enzyme deficiency lysosomal accumulation storage lysosomal_storage
1.4 [t317] survival patients stage prognostic recurrence outcome prognosis disease poor status
1.4 [t126] treatment therapy patients treated efficacy therapies treatments patient therapeutic benefit
1.3 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies
1.3 [t115] language word words processing english lexical comprehension semantic sentence aphasia
1.1 [t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular

6.7 Ethics and Confidentiality in Cancer Research

4.3 [t608] qualitative interviews experiences cultural social participants religious experience barriers quantitative
3.5 [t433] patients patient clinical diagnosis conclusions disease background diagnosed treated age
3.3 [t137] students program biomedical faculty undergraduate science college programs sciences student
3.2 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
3.1 [t90] challenges lessons emerging attention learned developments applications decades discusses presented
2.4 [t241] clinical translational_research translational resources clinical_research ctsa center infrastructure health translational_science
1.7 [t210] cancer cancer_center program cancer_research spore programs members center nci shared
1.6 [t187] countries international india brazil global_health country global developing_countries public_health thailand
1.6 [t19] patients dose mg toxicity phase_i grade median days months treatment

1.4 [t345] clinical_trials trials oncology cancer treatment clinical_research patients unit program clinical_trial

6.9 Resources and Infrastructure Related to Cancer Control, Survivorship, and Outcomes Research

3.5 [t374] incidence cases surveillance age trends population population_based prevalence diagnosis epidemiology
3.3 [t187] countries international india brazil global_health country global developing_countries public_health thailand
3.3 [t408] training program skills education interactive learning web_based programs curriculum content
2.6 [t350] lymphoma b_cell cll nhl lymphomas leukemia non_hodgkin rituximab malignancies patients
2.6 [t686] cancer breast cancer_risk women cancers cancer_patients cancer_survivors treatment diagnosis diagnosed
2.2 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
2.2 [t265] psychological psychosocial distress coping social_support social well_being functioning perceived variables
2.1 [t252] treatment patients management patient outcomes clinical medical care clinicians decisions
2.1 [t28] health social population economic survey national longitudinal retirement well_being demographic
2.0 [t395] theory framework theoretical conceptual concept theories relationships behavior dynamic empirical

7.1 Development and characterization of scientific models

2.9 [t23] tumor tumors tumor_growth mice tumor_cells treatment xenografts therapy xenograft cancer
2.9 [t600] proteins protein complexes functions protein_protein molecular biochemical family protein_complexes cellular
2.9 [t32] leukemia aml acute lymphoblastic mll acute_myeloid_leukemia leukemic pml leukemias patients
2.7 [t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular
2.3 [t480] therapeutic agents treatment therapies targets targeting therapy drugs inhibitors clinical_trials
2.2 [t667] trafficking intracellular endocytosis internalization cell_surface plasma_membrane sorting cells endocytic transport
2.0 [t350] lymphoma b_cell cll nhl lymphomas leukemia non_hodgkin rituximab malignancies patients
1.8 [t275] genes mutations genetic gene molecular human mutants defects disease screen
1.7 [t445] melanoma tumour melanomas melanocytes tumours metastatic cpg odn cells nis
1.6 [t686] cancer breast cancer_risk women cancers cancer_patients cancer_survivors treatment diagnosis diagnosed

7.2 Application of scientific models

4.9 [t350] lymphoma b_cell cll nhl lymphomas leukemia non_hodgkin rituximab malignancies patients
4.0 [t585] mm multiple_myeloma hgf myeloma survivin bortezomib cmet hepatocyte_growth_factor thalidomide patients
3.2 [t442] thyroid fine tip thyroid_cancer ret tuning ptc needle ao aspiration
3.1 [t675] gene_expression molecular genes genomic profiling signature gene signatures profiles targets
2.6 [t428] patients chemotherapy survival treatment adjuvant therapy treated median months stage
2.6 [t430] cancer treatment therapy tumor patients chemotherapy disease tumors cancers therapies

2.1	[t463] diagnostic diagnosis specificity tests predictive accuracy patients clinical detection curve
2.1	[t433] patients patient clinical diagnosis conclusions disease background diagnosed treated age
2.1	[t202] stem_cells regeneration cells stem_cell mesenchymal repair mscs msc bone_marrow tissue
2.0	[t597] cancer tumor tumorigenesis tumors myc tumor_suppressor human progression cancers molecular

H. Liste des subventions accordées par le NIH les plus proches des domaines thématiques de chaque subvention de l'INCa et de la DGOS

La liste des subventions NIH comparables pour chaque subvention INCa a été calculée en utilisant simplement les termes (mots) dans les subventions NIH et dans les projets financés par l'INCa. Les thèmes n'ont pas été utilisés pour calculer la similarité. La similarité standard mesurée par le cosinus tf-idf (fréquence du terme - fréquence inverse de document) a été utilisée pour calculer les similarités. Ce calcul renvoie une valeur comprise entre 0 et 1, 0 représentant aucune similarité et 1 représentant la similarité parfaite. Une similarité de 0,6 est considérée comme une correspondance relativement bonne et une similarité de 0,4 est considérée comme une correspondance pertinente. Pour conserver un certain degré de précision, un seuil de 0,4 a été utilisé pour exclure les correspondances médiocres. Ceci signifie que pour certains projets de l'INCa, il n'y a pas de subvention NIH correspondante répertoriée (par ex. INCa_DGOS_1355 : biomarqueurs prédictifs de la réponse au traitement par AntiEGFR dans le cancer colorectal, n'a pas de subvention NIH correspondante répertoriée). Une raison possible de l'absence de subvention NIH correspondante pour ce projet est que le résumé du projet était relativement long et donc la similarité avec une subvention NIH particulière n'a pas excédé le seuil de 0,4.

(DGOS_0274) Impact of the Human Papillomavirus (HPV) Status in Carcinologic Prognosis of Oropharynx Squamous Cell Carcinoma
0.54 NCI (2008) P01CA042792 EPIDEMIOLOGY OF HPV-RELATED SCSC IN TRANSPLANT PATIENTS
0.53 NCI (2008) P01CA042792 HPV: Biology, Clinical Significance and Epidemiology
0.52 NCI (2008) R03CA135679 Cytokine Variants as Predictors of HPV-16 Status &Outcome of Oropharyngeal Cance
0.51 NCI (2009) RC1CA145188 Oncogenic Human Papillomavirus Protein Network
0.51 NCI (2010) R01CA098803 Natural History of HPV Infection in Men: The HIM Study
0.51 NIDCD (2010) None The Role of Rac1 in HPV-induced Recurrent Respiratory Papillomatosis
0.51 NIDCR (2011) F31DE021926 MicroRNA Profiling and Tumor Progression in HPV+ Oropharyngeal Cancer
0.50 NIAID (2008) R21AI078489 New Cellular Effectors of Human Papillomavirus E7 Activity
0.50 NIGMS (2010) SC2AI090922 Anogenital HPV Infection in a Population-Based Sample of Puerto Rican Women
0.50 NHLBI (2011) R01HL108102 Fanconi Anemia as a Model for Susceptibility to Human Papillomavirus Infection
0.50 NCI (2008) R01CA105181 Natural History of HPV Infections in Men
0.50 NIAID (2011) R01AI091968 Virus-Host Interactions that Modulate Early Steps of Human Papillomavirus Infecti
0.49 OD (2011) R21CA167652 Incidence of HIV among Indian men who have sex with men
0.49 NCI (2009) P01CA022443 Molecular Genetics of Human Papillomavirus Infection and Oncogenesis
0.49 NCI (2010) None Biological Activity of HPV E7 in Human Epithelial Cells
0.49 NIDCR (2008) R01DE016631 Oral HPV Infection in HIV-Infected Men and Women
0.49 NICHD (2009) R03HD058771 Disclosure of High-Risk HPV Infection to Sex Partners of Young Men
0.48 NIAID (2009) U19AI084081 University of New Mexico Interdisciplinary HPV Prevention Center
0.48 NIAID (2010) R01AI038382 HPV Capsid Antibodies

(DGOS_0278) The H10 EORTC/GELA randomized Intergroup trial on early FDG-PET sca guided treatment adaptation versus combined modality treatment in patients with stages I/II Hodgkin's lymphoma.

(DGOS_0279) Young Adult With Acute Lymphoblastic Leukemia (ALL) : a Multicentric Protocol. GRAALL 2005 : T ALL or B ALL Non Ph GRAALL 2005 R : B ALL Non Ph CD20+ GRAAPH 2005 : ALL Ph (additionnal funding)

0.54 NCI (2008) P01CA042792 EPIDEMIOLOGY OF HPV-RELATED SCSC IN TRANSPLANT PATIENTS
0.54 NIDCD (2010) None The Role of Rac1 in HPV-induced Recurrent Respiratory Papillomatosis
0.54 NCI (2010) R01CA098803 Natural History of HPV Infection in Men: The HIM Study
0.54 NCI (2009) P01CA022443 Molecular Genetics of Human Papillomavirus Infection and Oncogenesis
0.53 NCI (2008) R03CA135679 Cytokine Variants as Predictors of HPV-16 Status &Outcome of Oropharyngeal Cance
0.53 NIAID (2008) R21AI078489 New Cellular Effectors of Human Papillomavirus E7 Activity
0.53 NCI (2009) RC1CA145188 Oncogenic Human Papillomavirus Protein Network
0.53 NIGMS (2010) SC2AI090922 Anogenital HPV Infection in a Population-Based Sample of Puerto Rican Women
0.52 NICHD (2009) R03HD058771 Disclosure of High-Risk HPV Infection to Sex Partners of Young Men
0.52 NCI (2008) R01CA105181 Natural History of HPV Infections in Men
0.52 OD (2011) R21CA167652 Incidence of HIV among Indian men who have sex with men
0.52 NCI (2008) R01CA102489 HPV Clearance by Folic Acid Supplementation
0.52 NCI (2008) P01CA042792 HPV: Biology, Clinical Significance and Epidemiology
0.52 NIAID (2011) R01AI091968 Virus-Host Interactions that Modulate Early Steps of Human Papillomavirus Infecti
0.51 NIAID (2010) R01AI038382 HPV Capsid Antibodies
0.51 NCRR (2010) None UHI COBRE: P1: MOL EPIDEMIOL &NATURAL HISTORY OF HPV IN HETEROSEXUAL MEN
0.51 NCI (2009) U01CA141583 Novel Interventions Against HPV-associated Neoplasia
0.51 NIAID (2010) None HITCH: A Study of HPV Transmission in Young Couples
0.51 NCI (2008) R01CA123346 COGNITIVE AND EMOTIONAL RESPONSES TO AN HPV DIAGNOSIS IN MEN

(DGOS_0282) "Prospective, randomized study of hepatocellular carcinoma treatment by multipolar radiofrequency. Comparison of a classical intra-tumoral method versus the extra-tumoral -no touch- method"

0.41 NCI (2008) Z01BC010313 Molecular signatures for liver cancer diagnosis and treatment stratification
0.41 NCI (2011) ZIABC010313 Molecular signatures for liver cancer diagnosis and treatment stratification

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(DGOS_0284) Prospective study estimating the probability of finding spermatogonia stem sell in frozen-thawed testicular tissue in a population of young boys waiting for allo- or autograft of haematopoietic stem cells

0.40 NCRR (2011) R21RR032553 Characterization of spermatogonial stem cells using long-term label retention

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(DGOS_0292) Impact of adjuvant chemotherapy on cognitive functions and quality of life in seniors patients: application to breast or colon cancers

0.50 NCI (2008) R01CA112035 Contributions of sleep/rhythms/fatigue to chemobrain
0.49 OD (2008) DP2OD004445 Assessment and Treatment of Cognitive Deficits in Breast Cancer
0.49 NCRR (2010) None EFFECT OF ADJUVANT CHEMO FOR EARLY BREAST CA ON BRAIN IMAGING AMP;COGNITION
0.48 NCRR (2009) P41RR013642 COGNITIVE AND BRAIN CHANGES AFTER ADJUVANT THERAPY IN BREAST CANCER

0.47 NINR (2008) R01NR010939 Altered Brain Function in Chemotherapy for Breast Cancer
0.44 NCI (2008) R03CA128397 Psychosocial Predictors of Cancer-Related Cognitive Change
0.42 NHLBI (2008) R01HL089311 Cognitive Benefits of Cardiac Rehabilitation in Heart Failure
0.40 NINDS (2010) None EFFECTS OF CHEMOTHERAPY AGENTS ON NEUROGENESIS IN ADULT MOUSE HIPPOCAMPUS
0.40 NCI (2008) R01CA109650 Cognitive Functioning After Breast Cancer Treatment

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(DGOS_0293) Performance of Imaging for the Diagnosis of Small Hepatocellular Carcinoma (< 3 cm)on Cirrhosis
0.52 NCI (2010) R01CA132962 A Genetic Screen for HCC Genes
0.50 NCI (2008) R01CA123544 Biomarker for Hepatocellular Carcinoma
0.50 NCI (2008) R03CA119313 Novel Machine Learning Methods for Analysis of MALDI-TOF Mass Spectrometry Data
0.50 NCI (2011) R01CA139158 INVESTIGATION OF THE ROLES OF NUCLEAR RECEPTOR FXR IN HEPATOCELLULAR
0.49 NCI (2011) 261201000034C-4-0-4 RRSS Evaluate Completeness Liver Cancer Reporting Under New Clinical Guidelines
0.49 NIDDK (2008) R03DK077707 Early Detection and Prognosis of Patients with Hepatocellular Carcinoma
0.49 NCI (2010) None Metabolomic and Integromic Approaches to Identify Fingerprints for Early Detectio
0.49 NCI (2009) R01CA122359 Role of S-nitroso-glutathione Reductase in Hepatocellular Carcinoma
0.49 NCI (2010) None Novel Reagents For The Detection Of Low Abundance Cancer Specific Glycoforms
0.48 NIDDK (2008) R01DK069859 Genes Related to HCC Progression in LD and DD Transplant
0.48 NIDDK (2008) R01DK066840 Novel markers for HCV-related HCC
0.48 NCI (2010) None Initiation, persistence, and progression of hepatocellular carcinoma
0.47 NCI (2011) K07CA160722 Use and Comparative Effectiveness of Innovative Therapies for Hepatocellular Carc
0.47 NCI (2010) None A Multidisciplinary and Translational Approach to Hepatobiliary Malignancy
0.47 NCI (2011) R01CA161209 Functional Genomics and Molecular Imaging of Liver Disease and Cancer
0.47 NCRR (2010) None INJURY-RELATED MORPHOGENIC PATHWAY SIGNALING AND HEPATOCARCINOGENESIS
0.47 NCRR (2011) P41RR005959 INJURY-RELATED MORPHOGENIC PATHWAY SIGNALING AND HEPATOCARCINOGENESIS
0.47 NCI (2009) R01CA095307 Effective PET Imaging in Liver Cancer
0.47 NCI (2008) R01CA100882 Molecular Pathogenesis of Hepatocellular Carcinoma

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(DGOS_0298) Evaluation of Low Level Laser Therapy for prevention of radio and chemo-induced oral mucositis.
0.52 NIDCR (2010) None Validation of the Children's International Mucositis Evaluation Scale (ChIMES)
0.52 NIDCR (2009) R43DE019735 Topical Anti-TNF Antibody for Oral Mucositis
0.51 NIDCR (2011) R44DE019740 Antimicrobial and Regenerative Treatment for Oral Mucositis
0.49 NIDCR (2010) None The oral microbiome during cancer chemotherapy and its role in oral mucositis
0.47 NINR (2009) RC2NR011945 Predicting Chemotherapy-Induced Mucositis with Genetic and Clinical Factors
0.43 NCI (2011) R44CA140166 Chemoprotectants for Head-Neck Therapeutics
0.40 NCI (2008) R21CA125000 Functional Infrared Imaging Predicts Radiation Mucositis

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(DGOS_0310) National Multicentric Phase II Study evaluating the association of radiotherapy in helical tomotherapy followed by retroperitoneal liposarcomas surgery.

(DGOS_0315) ISET method for identification of circulating tumour cells of non-small cell lung carcinomas
0.40 NCI (2009) R21CA137721 Isolation of rare circulating tumor cells from blood using microbubbles

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(DGOS_0320) Transplantation of Ex-vivo Expanded Human Cord Blood Hematopoietic Stem Cells Expanded: Evaluation of Hematopoietic and Immunologic Reconstitution After a Reduced-intensity Conditioning Regimen

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(DGOS_0322) Multicentric study of dihydropyrimidine dehydrogenase phenotypic and genotypic markers in capecitabin-treated breast cancer.

(DGOS_0325) Evaluation of the local efficacy of Radiofrequency ablation for treatment of unresectable non-small cell lung cancers patients: National Multicentric phase II study
0.43 None (2009) I01CX000286 Functional Image and Molecular Marker to Individualize Adaptive Radiation Dose Es

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(DGOS_0327) Impact of the alcohol-dependence care in patients treated for head and neck cancers

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(DGOS_0337) "Randomized phase II study of two associations of rituximab and chemotherapy, with a PET-driven strategy, in patients from 18 to 60 with DLBCL CD 20+ lymphoma and 2 or 3 adverse prognostic factors of the age-adjusted IPI."

(DGOS_0341) Evaluation of the efficacy of bioresorbable membranes on the prevention of postoperative abdominal adhesion formation in patients with colorectal cancer requiring staged liverl resection

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(DGOS_0342) Urinary Metabolomics and Aldehyde Dehydrogenase Pharmacogenetic and Enzymatic Activity as Markers of Ifosfamide-induced Nephrotoxicity in Children with Cancer - a Pilot observational Study -

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(DGOS_0344) Provision of a Markov chain model for defining an optimal strategy for the detection of medullary thyroid carcinoma

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(DGOS_0346) Determining the impact of radiotherapy of good prognosis glial tumours in adults on neurocognitive functions : multicentric prospective study

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(DGOS_0347) Tissue factor and microparticles in non-small cell lung cancer: research into mechanisms explaining the anti-tumour activity of low molecular weight heparins (TILT-Bio).

(DGOS_0348) Study of Positron Emission Tomography With 18-fluorodeoxyglucose in Detecting Cancer in Patients With Idiopathic Venous Thromboembolism

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(DGOS_0354) Evaluation of haematopoietic stem cells transplantation in the treatment of intestinal low-grade lymphomas (refractory celiac disease of type II) associated with celiac disease.

(DGOS_0357) Evaluation of the Irinotecan/Bevacizumab Association as Neo-adjuvant and Adjuvant Treatment of Chemoradiation With Temozolomide for Naive Unresectable

Glioblastoma. Phase II Randomized Study With Comparison to Chemoradiation With Temozolomide
0.42 NCRR (2009) M01RR000188 CLINICAL TRIAL: PBTC-022 PHASE II STUDY OF BEVACIZUMAB PLUS IRINOTECAN (CAMPTOSA
0.42 NCRR (2011) M01RR000188 CLINICAL TRIAL: PBTC-022 PHASE II STUDY OF BEVACIZUMAB PLUS IRINOTECAN (CAMPTOS

(DGOS_0360) prostate biopsy assisted by Ultrasonography / MRI to improve cancer prostate detection
0.52 NCI (2010) None A diagnostic test for improved prostate cancer diagnosis in abnormal biopsies
0.49 NCI (2008) R21CA127186 Detecting Prostate Cancer using multi-protocol 3 Tesla in vivo MRI and MRS
0.49 NCI (2009) ZIABC010655 Prostate Cancer Imaging
0.49 NCI (2008) Z01BC010655 Prostate Cancer Imaging
0.48 NCI (2011) R01CA156775 Molecular Imaging Directed, 3D Ultrasound-guided, Biopsy System
0.47 NCI (2011) ZIABC010655 Prostate Cancer Imaging
0.47 NCI (2008) Z01BC011081 Prostate Section
0.46 NCI (2010) None Prostate Section
0.46 NIBIB (2009) RC1EB010936 Robot-Assisted MRI-Guided Prostate Biopsy
0.46 NCI (2011) R21CA156945 Assessment of Amide-Proton-Transfer MRI in Prostate Cancer
0.45 NCI (2011) ZIABC011081 Prostate Section
0.41 NCRR (2009) U41RR019703 MR GUIDED THERAPY
0.41 NCI (2010) None Prostate Cancer In Vivo Using an Ultra Low Field MRI Device
0.40 NCI (2008) R01CA118003 US Prostate Cancer Detection with Dutasteride Pretreatment

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(DGOS_0362) Open vs Laparoscopically-assisted Esophagectomy for Cancer: A Multicentric Phase III Prospective Randomized Controlled Trial

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(DGOS_0363) Stereotaxic Irradiation of Hepatocellular Carcinoma : Phase II Study

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(DGOS_0365) Phase II randomised trial to evaluate two strategies: continuing versus intermittent (drug-holiday) trabectedin-regimen in patients with advanced soft tissue sarcoma experiencing response or stable disease after the sixth cycle.

(DGOS_0366) Phase III multicentric trial evaluating the impact of a 16-Gy localized boost after breast-conserving surgery and whole breast radiotherapy (50 Gy) in ductal carcinoma in situ.
0.43 NCI (2008) R01CA120562 Commonly Used Medications and Breast Cancer Recurrence
0.42 NCI (2011) R01CA153490 Role of S100A7 in breast cancer progression and metastasis
0.40 NCI (2008) R01CA109570 14-3-3zeta in Early Stages of Breast Cancer Progression
0.40 NCI (2011) R03CA161752 Costs and Complications of Radiotherapy Modalities

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(DGOS_0378) Phase II-III study comparing radiochemotherapy with the Folfox regimen versus radiochemotherapy with 5FU-cisplatin (Herskovic regimen) in first line treatment of patients with inoperable oesophageal cancer

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(DGOS_0380) Evaluation of the role of Tissue Factor and microparticles in thrombosis development in Thalidomide or Lenalidomide-treated patients with multiple myeloma : biological study of the MM020/IFM0701 protocole

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(DGOS_0383) Adjuvant treatment of cancers of the intra-hepatic and extra-hepatic bile ducts and the gallbladder: comparison of a six-month adjuvant combination chemotherapy gemcitabin-oxaliplatin (GEMOX) versus surveillance. Phase III randomized trial

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(DGOS_0385) Determination of predicitve response markers to trastuzumab-everolimus in preoperative therapy of localised breast tumous overexpressing HER2 (trial GEP04 RADHER)
0.45 NCI (2011) R01CA152045 Role of Immunity in Efficacy of Chemotherapy Plus Trastuzumab
0.42 NCI (2009) R21CA139428 Prognostic and predictive gene sets in HER2-positive breast cancer:The HERA Trial
0.42 NCI (2008) R01CA129949 Predictive Biomarkers of Adjuvant Trastuzumab in the HER2+N9831 Intergroup Trial

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(DGOS_0387) Prospective Multicentric Optimization and phase I/II Study of Pretargeted Radioimmunotherapy (PRAIT) using anti-CEA x anti-HSG TF2 Bispecific Antibody (bsMAb) and 177Lu-IMP-288 Peptide in Patients with CEA-expressing Small Cell Lung Carcinoma (SCLC)

(DGOS_0392) Protocole IFM 08-01 (GENOMGUS) : Large Scale Study of DNA Copy Numbers Variations and Gene Expression Profile of Bone Marrow Plasma Cells From Monoclonal Gammopathy of Undetermined Significance (MGUS) and Smoldering Myeloma (SMM). Search for correlations with the risk of progression in order to establish a predictive model of early malignant transformation.
0.47 NIAMS (2010) None Pathogenesis of Monoclonal Gammopathy Bone Disease
0.44 NCI (2008) P01CA062242 Epidemiology of MGUS in Southeastern Minnesota
0.40 NCI (2009) R01CA107476 Prevalance and Progression of Monoclonal Gammopathies

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(DGOS_0397) "Biological response to tamoxifen (TAM) in patients with breast cancer non metastatic RH+ "
0.45 NCI (2011) R01CA155307 CYP2D6 gene variants and effectiveness of adjuvant tamoxifen in breast cancer
0.44 NCI (2008) R01CA122914 PKC Alpha as a Marker for Logical Therapeutic Approaches to Breast Cancer
0.43 NCI (2008) R01CA133049 Tamoxifen biotransformation pathway pharmacogenomics
0.41 NCI (2010) R01CA138410 Regulation of miRNA in breast cancer

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(DGOS_0401) Evaluation of PET-FET and Spectro-MRI for differential diagnosis of early recurrence and tumour radionecrosis after radiosurgery of brain metastases in adults.

(DGOS_0410) Phase II study evaluating toxicity and efficacy of tacrolimus in patients with large T or B cell lymphoma
0.40 NIDDK (2008) R03DK078707 Calcineurin in Pathologic Zymogen Activation
0.40 NIAID (2008) R01AI040127 Signal transduction and gene induction in T lymphocytes

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(DGOS_0415) Assessment of a new radiopharmaceutical: 18F fluoro ethyl tyrosine (FET) for low-grade gliomas diagnosis.

(DGOS_0416) "Bicentric Phase II trial of immunization with autologous dendritic cells exosomes (Dex) and adjuvant poly [I]: poly [C (12) U] (AmpligenR) in patients with inoperable non-small cell lung cancer (NSCLC), advanced (stage IIIB, IV), responsive or stabilized after induction chemotherapy with gemcitabine and cisplatin."

(DGOS_0417) "MARGES-ORL 2: Validation of the decision value of molecular analysis of surgical resection margins in carcinomas of the oral cavity and oropharynx of limited size. "

(DGOS_0420) Curative radiotherapy in lung cancer: two meta-analysis based on individual data.
0.47 NCI (2008) K07CA131473 Skin Toxicity Effects in Breast Radiation: A Cognitive Behavioral Intervention
0.46 NCI (2008) R21CA129201 Biobehavioral Effects of Qigong During Treatment for Rectal Cancer
0.43 NCI (2008) R21CA128230 Phase II validation of 4-dimensional computed tomography derived ventilation for
0.42 NCI (2008) P30CA124435 Project 2- Radiation Biology
0.42 NCI (2009) R01CA131408 HIF genes in head and neck cancer radiotherapy
0.42 NCI (2008) P50CA070907 University of Texas SPORE in Lung Cancer
0.41 NCI (2011) K08CA158425 Assessing the Notch Pathway as a Therapeutic Target in Lung Cancer Adenocarcinoma
0.41 NCI (2009) K01CA125204 Improving Effectiveness and Accuracy of Radiation Therapy
0.41 NCI (2008) K01CA125204 Improving Effectiveness and Accuracy of Radiation Therapy
0.40 OD (2010) None Discovering Nrf2 inhibitors to enhance cancer chemotherapy and radiotherapy

(DGOS_0424) Phase II study of intensive chemotherapy in treating patients with refractory germ cell tumors

(DGOS_0427) Phase III studies comparing isolated pelvic perfusion with 0.3mg TNFalpha and 15mg/kg melphalan with standard treatment in locally-unresectable carcinomas

(DGOS_0428) Spectro RMI imaging and radiotherapy of glioblastoma

(DGOS_0435) Phase II randomized study comapring vinblastin-nilotinib versus vinblastin alone in children and young patients with low grade glioma with relapse

(DGOS_0442) Fat tissue transfer for treatment of moderate sequels from breast conservatory treatment . Multicentre study.

(DGOS_0444) Randomized phase III multicentre trial of concomitant chemotherapy in patients with locally advanced HNSCC treated by radiotherapy-erbitux

(DGOS_0447) "Phase II study evaluating sorafenib with Irinotecan and cetuximab in metastatic colorectal cancer and K-RAS Mutation "

(DGOS_0448) Short term and long term outcomes in criitically ill hematology patients. Multicentre cohort TRIAL OH
0.49 NINR (2008) F31NR010436 Predictors of Agitation in the Critically III
0.47 NHLBI (2008) R01HL088045 Improving Long-Term Physical and Mental Health after Acute Lung Injury
0.47 NHLBI (2010) None ICU-ACQUIRED NEUROMUSCULAR DYSFUNCTION AND OUTCOMES IN ACUTE LUNG INJURY
0.45 NHLBI (2009) K24HL088551 Five Year Outcomes from Acute Lung Injury
0.44 NIAAA (2010) None Substance Abuse and Psychiatric Disorders in Intensive Care Unit Survivors
0.44 NIA (2008) K08AG031583 Continuity of care and end of the life ICU use

0.43 NIDDK (2008) U01DK082192 Impact of Acute Kidney Injury on Kidney Disease Progression
0.43 NLM (2011) R21LM010954 Exploring the Feasibility of Approximate Sequential Pattern Discovery in Massive
0.43 NHLBI (2011) F30HL107020 ICU Discharge: A Critical Juncture for Survivors of Acute Respiratory Failure
0.42 NHLBI (2008) R01HL086667 Early Insulin Therapy and Development of ARDS
0.42 NIA (2008) R01AG027472 The MIND ICU Study
0.42 NCI (2009) R21CA139264 ICU Triage Decisions for Elders with End Stage Cancer: the Role of Patient Race
0.42 NINR (2010) None Healthcare-acquired Infection Risk and Toothbrush Contamination in the ICU
0.42 None (2009) K08HS018406 Measuring and Mitigating Patient Safety Threats Due to Strains on ICU Capacity
0.42 NINR (2011) F31NR012340 Healthcare-acquired Infection Risk and Toothbrush Contamination in the ICU
0.42 NIA (2010) None Use of intensive care services for elderly patients undergoing high risk surgical
0.41 NHLBI (2008) R01HL093142 Intensive Nutrition in ARDS: A Clinical Trial (INTACT)
0.41 NINR (2008) R01NR005226 Randomized trial of an interdisciplinary communication intervention to improve pa
0.41 NINR (2009) R21NR011066 Feasibility of Measuring Sleep in a Critical Care Environment

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(DGOS _0459) "Ultrasonography with injection of contrast medium, helical CT, MRI or positron emission tomography with 18-FDG for the detection of colorectal cancer liver metastases: a systematic review and meta-analysis."

(DGOS_0478) Comparative assessment of methods to analyze MGMT as a predictive factor of response to temozolomide in glioblastomas.
0.42 NCI (2009) P50CA127001 Prediction of Chemoradiation response in Glioblastoma to individualize Therapy

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(DGOS_0480) Assesment of KRAS mutation detection for anti EGFR therapy in patients with metastatic colorectal cancer
0.42 NCI (2009) RC1CA146260 Polymorphism and mutation spectrum in minorities with non-small cell lung cancer
0.42 NCI (2009) R44CA121473 Novel Methods for Molecular Analysis of Colorectal Cancer Tissue
0.41 NCI (2010) None SBIR Topic 255: Evaluate Therapeutic Potential of Novel Immunomodulator, Imprime
0.41 OD (2009) RC2CA148471 Comparative effectiveness in genomic &personalized medicine for colon cancer
0.40 NCI (2009) R01CA140594 Inhibition of P13k and MEK Pathways in the Treatment of Lung Cancer

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(DGOS_0485) Chimera in haematopoietic stem cells allograft follow up: prescription rationalisation and medico-economic analysis of care

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(DGOS_0489) GENSARC 2008: Medico-economics assesment of molecular detection by in situ hybridisation (FISH) and by PCR of translocations and specific amplifications in sarcoma

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(DGOS_0494) SENTICOL 2: Comparison between isolated sentinel node and sentinel node + full pelvic lymph-node dissection in early cervical cancer: a randomized multicentre study with medico-economics assessment
0.63 NCI (2011) R01CA100183 Advanced Ultrasonic Evaluation of Sentinel Lymph Nodes
0.53 NCI (2008) K23CA109115 Molecular studies of T cell clones for adoptive therapy

0.51 NCI (2009) R21CA127683 Molecular Predictors of Colorectal Cancer Recurrence
0.51 NCI (2008) R01CA120228 Surgery and the Mechanisms of Lymph Node Metastases in Cutaneous Melanoma
0.50 NIBIB (2008) R01EB008101 Acoustic Imaging of Sentinel Node Metastasis using Plasmonic Nanosensors
0.49 OD (2011) DP2OD008780 Characterizing lymphatic micrometastases: prognostic and therapeutic implications
0.49 NIBIB (2010) None INTRAOPERATIVE OCT FOR DETERMINING LYMPH NODE STATUS AND STAGING CANCER
0.48 NCI (2008) K23CA122182 Radioguided Detection of Lymph Node Metastasis in Non-Small Cell Lung Cancer
0.48 NCI (2008) R43CA130238 Novel RNA Markers for Detecting Colon Cancer Metastasis
0.46 NCI (2008) R01CA126820 The lymph node microenvionment in tumor metastasis
0.45 NCI (2008) R01CA114277 Predicting Metastasis in Melanoma
0.45 NINDS (2008) R01NS043474 Assembly of the Node of Ranvier
0.45 NCI (2008) R21CA126037 A New Radiotracer for Sentinel Node Mapping of Colon Cancer
0.44 NIDA (2008) U10DA015831 CTN: Northern New England Node
0.44 NIDA (2008) U10DA015833 Clinical Trial Network: Southwest Node
0.44 NIAID (2008) R01AI068900 Lymphoid Tissue Microvessel Growth
0.44 NCI (2010) None Photoacoustic / Optical / Ultrasonic Imaging of Sentinel Lymph Nodes and Metastas
0.44 NCI (2008) U54CA136398 Photoacoustic / Optical / Ultrasonic Imaging of Sentinel Lymph Nodes and Metastas
0.43 NIDA (2010) None The National Drug Abuse Treatment Clinical Trials Network

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(INCa_0513) The GET (Genetics and Epigenetics of Tumor) An integrated approach to profile Breast Cancer from model systems to biological resources.
0.40 NCI (2010) R21CA139396 Genetic Variation Affecting Epigenome and Breast Cancer Susceptibility

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(INCa_0516) Hereditary predisposition to breast cancer linked to BRCA1/2 mutations: molecular basis for preventive strategies
0.53 NCI (2011) F32CA162847 Obesity susceptibility loci and breast cancer risk in BRCA1 and BRCA2 mutation ca
0.50 NCI (2008) R01CA094170 Transcriptional Role of BRCA1 in Breast Cancer
0.50 NCI (2008) R01CA104546 BRCA Genes in Breast Cancer Chemoprevention
0.49 NCI (2008) R01CA111480 Centrosomes and BRCA1
0.49 NIDDK (2008) Z01DK056009 Chemoprevention and therapeutic treatment of BRCA1 associated mammary tumors
0.49 NCI (2010) R01CA150646 Development of BRCA1-mimetic drugs for breast cancer
0.49 NCI (2008) R01CA128978 A genome-wide association study for breast cancer in BRCA1 mutation carriers
0.48 NCI (2008) R01CA102776 Modifiers of Cancer Risk in BRCA 1/2 Mutation Carriers
0.48 NCI (2009) R01CA129440 ROLE OF BRCA1/AKT1 PATHWAY IN THE TUMORIGENESIS
0.48 NCI (2008) R01CA082599 BRCA1 Modulates Estrogen Receptor Response in Breast Cancer
0.48 NCI (2008) R01CA093506 BRCA1 IN GENE REGULATION AND TUMOR SUPPRESSION
0.47 OD (2011) R03MH093215 HTS Assay to Identify Small Molecule Activators of BRCA1 Expression
0.47 NCI (2009) R01CA137102 BRCA1 and progesterone receptors in breast cancer
0.45 NCI (2008) R44CA110403 Molecular Test for Inherited Mutations in Breast Cancer
0.45 NCI (2008) R01CA080000 Role of BRCA1 as a Human Tumor Suppressor Gene
0.45 NCI (2009) F32CA144402 Molecular basis of genomic instability in aggressive basal-like breast cancer
0.45 NCI (2010) None Role of EZH2 in Breast Cancer Progression

0.44 NCI (2009) R01CA137023 The Role of BRCA1/BARD1 in Basal-like Breast Cancer
0.44 NCI (2011) ZIABC010847 Gene-specific Mechanisms of BRCA1 transcriptional Control

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(INCa_0517) Analysis of a new tumor suppressor gene in myeloid hemopathies
0.40 NHLBI (2008) R01HL088747 ICSBP Function During Myeloid Differentiation

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(INCa_0519) Role of the XMRV retrovirus in prostate tumor progression: fundamental basis for innovative vaccinal approaches
0.46 NCRR (2011) P20RR020159 MECHANISMS OF XMRV ONCOGENESIS IN PROSTATE CELLS
0.45 NCI (2010) None Detection and Analysis of Mouse Retroviruses in Humans
0.44 NCI (2011) ZIABC011325 Search for XMRV
0.44 NCI (2010) None Search for XMRV
0.43 NIMH (2010) None Viral And Cellular Factors Governing Efficient Gene Delivery
0.43 NCI (2010) None Replication and Pathogenic Potential of XMRV in Humans
0.41 NIAID (2011) R21AI094059 Recruitment of host noncoding RNAs by XMRV
0.41 NIAID (2011) R21AI093186 Small animal model for XMRV infection
0.41 NIBIB (2008) R01EB009040 HIFU-enhanced tumor vaccines
0.41 NHLBI (2011) R21HL109761 Optimization of XMRV and other MLV-related virus detection for screening of blood

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(INCa_0525) GENESIS: Identification and characterisation of new genes of breast cancer predisposition: national study of pairs of affected sisters and controls (unaffected sisters and unrelated controls).
0.44 NIEHS (2011) ZIAES102245 The Two Sister Study
0.43 NCMHD (2009) N01ES45525 Environmental and Genetic Risk Factors for Breast Cancer
0.42 NIEHS (2008) Z01ES102245 The Two Sister Study
0.42 NEI (2008) R01EY011309 ETIOLOGIC STUDIES OF AGE-RELATED MACULAR DEGENERATION

(INCa_0543) Selective Inhibition of Signaling Modules In Cancer

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(INCa_0544) Mechanisms of NUP98-associated leukemogenesis
0.45 NIGMS (2011) F32GM099160 Characterization of Hox transcription factor complexes using proteomics
0.45 NCI (2009) F31CA130553 Hox gene regulation by the Snf5 tumor suppressor
0.44 NIGMS (2008) R24GM074105 Integrated Approcahes to Find Hox-regulated DNA Elements
0.42 NIGMS (2008) R01GM034431 Molecular Analysis of Segmentation in Drosophila
0.41 NHLBI (2008) R01HL081186 Probing the Hematopoietic Hox Code
0.41 NIGMS (2008) R01GM054510 Molecular Genetics of Segment Identity
0.41 NIDDK (2008) R01DK061916 Development of the Metanephric Mesenchyme
0.40 NIEHS (2008) R01ES010610 Alteration of HOX Gene Expression by Endocrine Disrupting Chemicals
0.40 NICHD (2008) R37HD028315 Specificity in Homeotic Response Elements

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(INCa_0548) Role of cAMP signalling for eradication of APL leukemia initiating cells
0.59 NCI (2010) R01CA083962 THE BIOLOGY OF PROMYELOCYTIC LEUKEMIA IN A MOUSE MODEL
0.49 NCI (2008) R01CA056771 Assessment of Clinical Retinoid Activity in Leukemia
0.43 NCI (2010) None Targeting PML for therapy in leukemia-initiating cells
0.42 NCI (2009) R01CA095274 Molecular Mechanisms of Leukemogenesis by PMLRAR alpha
0.41 NCI (2010) R01CA142874 Targeting PML for leukemia therapy.

(INCa_0550) Cisplatin resistance mechanisms in lung cancers
0.50 NCI (2011) R01CA151248 Role of DDB2 in chemotherapeutic agents-induced apoptosis and platinum resistance
0.48 NIDCD (2009) R21DC010231 Localization of cisplatin and cisplatin-binding proteins in the inner ear
0.47 NIDCD (2009) R03DC010225 Role of protein nitration in cisplatin mediated ototoxicity
0.47 NIDCD (2009) F32DC009950 Amelioration of cisplatin ototoxicity by transplatin
0.47 NIDCD (2009) F30DC010522 Heat Shock Protein-Induced Protection Against Cisplatin-Induced Hair Cell Death
0.46 NCI (2008) R01CA086061 Mechanistic Comparison of Cisplatin with Synthetic DNA Repair-Shielding Anticance
0.46 NIDCD (2011) R21DC010909 EFFECTS OF CISPLATIN ON INNER EAR STEM CELLS
0.46 NIDDK (2010) None Acute Kidney Injury by Cisplatin and Renoprotective Strategies
0.46 NIDCD (2011) R15DC011412 Targeting Inflammation for the Amelioration of Cisplatin-Hearing Loss
0.46 NIDDK (2009) R00DK080774 Protective Role of Mrp2 During Chemotherapy-Induced Kidney Injury
0.45 NCCAM (2011) F31AT006644 The Use of Hyperthermia and Copper Chelation to Overcome Cisplatin Resistance
0.45 NCI (2008) R01CA113344 Cisplatin Damage Response and Cell-to-cell Communication
0.45 NIDDK (2008) K99DK080774 Protective Role of Mrp2 During Chemotherapy-Induced Kidney Injury
0.45 NCI (2008) R01CA057530 Significance of GGT Expression in Tumors
0.44 NCI (2008) R01CA116590 Cross-linked Polymer Micelles in Cancer Therapy
0.44 NCI (2008) R21CA128193 A Phase I/II Clinical Trial of Intravenous (I.V.) Calcitriol with Fixed Doses of
0.44 NCI (2009) R01CA131049 Prospective Validation of Genomic Signatures of Chemosensitivity in NSCLC
0.43 NCI (2011) ZIABC010830 Mechanisms of non-classical multidrug resistance in cancer

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(INCa_0554) MAPK signaling in hematopoietic lineages differentiation
0.44 NIMH (2008) R01MH057014 Biochemical Mechanisms of Long-Term Potentiation
0.42 NHLBI (2008) F32HL085980 Nuclear alpha1-Adrenergic Receptor Signaling in Adult Mouse Cardiace Myocytes
0.42 NCI (2011) R01CA086017 Molecular Characterization of Acute Myeloid Leukemia
0.40 NINDS (2009) R01NS064865 Striatal cholinergic neurons and L-DOPA induced dyskinesia
0.40 NIAMS (2009) R01AR056246 ERK Signaling in Inflammatory Bone Loss

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(INCa_0557) Bone resorption as new therapeutic target in Ewing sarcoma: from genetic data to pre-clinical proof of concept in new animal models.
0.42 NIAMS (2011) R01AR052705 Alternative NF-kB in Bone Microenvironment
0.40 NCI (2009) P01CA100730 Role of Bone Microenvironment in Tax Induced Malignancies

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(INCa_0561) Synthesis and evaluation of novel antivascular agents based on natural products

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(INCa_0562) "New therapeutic antitumor DNA vaccine, combining particulate antigen secretion and proimmune treatments"
0.49 NCI (2009) ZIABC010749 DNA Vaccines
0.49 NCI (2008) R01CA114336 Optimization of Tumor Vaccines for the Aged
0.49 NCI (2011) ZIABC010749 DNA Vaccines
0.49 NCI (2009) ZIABC010350 Prevention of AIDS

0.48 NIBIB (2008) R01EB009040 HIFU-enhanced tumor vaccines
0.48 NCI (2011) ZIABC010350 Prevention of AIDS
0.46 NCI (2011) R01CA149451 Virus-Like Particle Based Antigen Display as Multi-component Anticancer Vaccines
0.46 NCI (2008) R01CA102303 Dendritics Cell Immunotherapy for Colorectal Cancer
0.44 NCI (2008) Z01BC010350 Prevention of AIDS
0.44 NCI (2008) R01CA056821 Immunization Against Melanoma Differentiation Antigens
0.44 NCI (2009) ZIABC011073 Immunobiology of Pediatric Tumors
0.44 NCI (2008) R01CA107243 TLR-mediated DC activation and immune reconstitution
0.44 NCI (2011) R01CA154656 Mechanistic Dynamic Study of Intranodal Chemokine-aided Antitumor Immune Priming
0.44 NCI (2010) None Prevention of AIDS
0.42 NCI (2008) R01CA132077 rAAV vaccine vector
0.42 NCI (2008) U19CA113341 OVARIAN CANCER MESOTHELIN ANIMAL MODEL/DNA VACCINES
0.42 NCI (2008) Z01BC010749 DNA Vaccines
0.42 NIAID (2008) U01AI070346 Dev. of Optimized/Adjuvanted Smallpox DNA Vaccine (Gene Gun)
0.42 NCI (2008) P50CA062924 Antigen-Specific Monitoring and Therapy in Pancreatic Cancer

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(INCa_0563) Molecular and clinical study of NKp30 receptor isoforms

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(INCa_0583) Exploitation of anti-tumor properties of alpha-galactosylceramide by dendritic cell targeting in vivo
0.43 NIAID (2011) R21AI093944 The Role for NKAP in iNKT cell development
0.41 NIAID (2008) R01AI059739 Immunobiology of NKT cell development and function
0.41 NIAID (2009) R21AI083513 Hunting for Endogenous Ligands for Invariant Natural Killer T Cells
0.41 NIAID (2008) F32AI080087 Invariant NKT cell responses to viral infections and tumors

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(INCa_0585) VE-statin/egfl7 in lung and breast cancer
0.46 NCI (2010) None Role of iNOS, Nitric Oxide &Arginase in Statin-Mediated Toxicity in Cancer Cells
0.43 NCI (2011) R01CA158528 miR-126 Regulation of Tumor Progression
0.43 NHLBI (2008) R01HL082098 Role of Egfl7 in Vascular Development and Angiogenesis
0.40 NIDCR (2010) None The Effect of Statin on Diabetes-Associated Peridontal Disease
0.40 NHLBI (2010) None Pharmacogenomics and Risk of Cardiovascular Disease

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(INCa_0593) Sphingosine 1-Phosphate as a regulator of intratumoral hypoxia
0.54 NIMH (2009) ZIAMH001039 Sphingolipid Signaling
0.52 NCI (2008) R01CA061774 Sphingosine Kinases in Cancer Cell Signaling
0.51 NCI (2009) R44CA110298 Commercialization of ASONEP for the Treatment of Cancer
0.46 NIAMS (2009) F31AR057307 The role of Sphingosine Kinase 1 in a Mouse Model of Chronic Inflammation
0.46 NINDS (2008) F31NS060433 The Role of Sphingosine Kinases in the Growth and Invasion of Giloma Cells
0.46 NIDDK (2011) ZIADK056016 Sphingolipid Biology of Neurodegeneration
0.45 NIDDK (2008) Z01DK056016 Sphingolipid Biology of Neurodegeneration
0.45 NCI (2011) R01CA061774 Sphingosine kinases in cancer cell signaling
0.44 NINDS (2008) R21NS063283 The role of sphingosine kinase 1 (SphK1) in primary glioblastomas
0.44 NINDS (2008) F30NS058008 Intracellular Target of Sphingosine-1-Phosphate
0.43 NHLBI (2008) K08HL079239 The role of S1P signaling in surgical cardiac remodeling
0.43 NCI (2009) R01CA098920 Hypoxia and Anticancer Drug Action
0.43 NCI (2008) R01CA104834 Alkaline Ceramidase and Sphingolipid Signaling

0.42 NCI (2008) P01CA017094 MECHANISTIC AND TRANSLATIONAL STUDIES OF THE HYPOXIA RESPONSE IN CANCER
0.41 NCI (2008) R01CA112561 Mechanisms of Tumor Protection for T Cells by Hypoxia
0.40 NIDDK (2008) K08DK070468 Sphingolipid Signaling in Wilms' Tumor Cells
0.40 NCI (2008) R01CA134687 Regulation of Transcriptional Activity of Hypoxia Inducible Factor 2

(INCa_0594) CDC25A and B phosphatases in Acute Myeloid Leukemia and Myeloproliferative Disorders. Key players ? Good Targets ?

(INCa_0597) Physiopathology of plasma cell neoplasia: molecular mechanisms and intyeraction with the tumor microenvironment

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(INCa_0600) From integrated genetic landscape to relevant models in rhabdomyosarcoma

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(INCa_0602) Integrated regulation of glioblastoma angiogenesis by the Unfolded Protein Response
0.45 NIGMS (2008) R01GM064350 Translational Control by eIF2 Kinase during ER Stress
0.44 NHLBI (2011) R01HL105924 Thrombospondin 4 regulates adaptive ER stress response
0.44 None (2009) I01BX000214 Effect of Stress on Glutamate Receptors and Signaling Proteins in the Basolateral
0.43 NIGMS (2009) R01GM084386 Cellular Responses to Stress
0.43 NIGMS (2008) R01GM084386 Cellular Responses to Stress
0.42 None (2011) I01BX001108 Mechanisms of ER Stress and Neurodegeneration in Parkinson's Disease
0.42 NIGMS (2008) F31GM077100 Physical Stress Communication to the Regulators of beta
0.42 NIGMS (2008) R01GM083989 Functional Genomics of Stress Defense in Yeast
0.41 NIMH (2010) None Stress adaptations in endocannabinoid signaling in the amygdala
0.41 NEI (2008) R01EY018172 Unfolded Protein Response in Lens Epithelial Cells
0.41 OD (2010) None Role of a Novel Stress Response Mechanism-Genetic Buffering-in Tumor Evolution
0.40 NCRR (2009) P51RR000163 COMMON LIFE STRESSES &FERTILITY IN PRIMATES

(INCa_0607) Preclinical validation of FGFR1 as potential therapetic target in breast cancer
0.66 NCI (2009) U01CA141497 Role of FGFR1 signaling in distinct cell lineages in prostate cancer progresssion
0.63 NCI (2008) R01CA105043 Pathogenesis &Therapy of 8p11 Leukemia/Lymphoma
0.59 NICHD (2008) U54HD028138 The Genetic Basis of the Neuroendocrine Control of Reproduction in the Human
0.58 NIMH (2010) K01MH087845 The Role of Astrocytes in Cortical Interneuron Development
0.58 NCI (2008) R01CA076167 Genetic Analysis of Myeloproliferative Disease
0.50 NCI (2010) R01CA140515 Tyrosine Kinase Signaling in Cancer Cell Metabolism
0.49 NCI (2008) Z01CP010154 Genetics and Epigenetics of Cancer
0.48 NIAMS (2008) R01AR050627 Regulating Osteoblast Proliferation and Differentiation
0.46 NCI (2008) R01CA067946 PRODUCTION OF ALTERNATIVE FGF RECEPTOR FORMS IN TUMORS
0.43 NIDDK (2008) R01DK070030 Role of FGF Receptors in the Developing Kidney
0.41 NIMH (2009) R01MH067715 Morphogenesis and Function of the Cerebral Cortex
0.40 NCI (2011) R01CA132827 Inflammation in Breast Cancer Initiation and Promotion

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(INCa_0609) Lack of PTEN overcomes senescence barrier and promote melanoma metastasis.
0.54 NCI (2008) R01CA082328 PTEN and ontogenesis and tumor suppression
0.54 NCI (2010) None Targeting Pten - An Upstream, Downstream and Offstream Approach

0.54 NIDA (2009) ZIADA000515 Effects of a null mutation of the tumor suppressor gene PTEN in dopamine neurons
0.54 NCI (2009) P01CA128814 Metabolic Targets in Pten-Tumors
0.53 NCI (2008) R01CA112243 Melanoma RAS/BRAF Mutation--Heterogeneity-Risk-Prognosis
0.53 NCI (2008) R01CA108614 Novel targets that are deregulated by loss of PTEN
0.53 NCI (2011) P01CA097403 The role of PTEN in basal-like breast cancer
0.52 NCI (2008) R01CA085912 Functional Analysis of the PTEN Tumor Suppressor Protein
0.51 NCI (2008) R01CA105453 Novel Mechanisms of PTEN Gene Regulation
0.51 NCI (2010) None The effects of PTEN on tyrosine kinase signaling in breast cancer
0.51 NCI (2009) R01CA099961 ATF2 in melanoma development and progression
0.50 NCI (2009) R01CA137365 Molecular signatures of melanoma histology and progression: A Population Based A
0.50 NCI (2008) R01CA095798 Genetics of RAS, PTEN, BRAF and CDKN2A in Melanoma
0.50 NCI (2009) P01CA128814 Targeting Pten - An Upstream, Downstream and Offstream Approach
0.49 NCI (2010) None The role of c-Met expression in melanoma growth and migration
0.49 NIGMS (2011) F32GM095344 Integrated Theoretical and NMR Studies of PTEN-lipid Interactions
0.49 NINDS (2008) K08NS044978 PTEN Anti-Oncogene Influences on Neuronal Function &Toxicity
0.48 NIGMS (2010) None Integrated Theoretical and NMR Studies of PTEN-lipid Interactions
0.47 NHLBI (2009) R01HL088643 Role of PTEN in Vascular Lesion Formation

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(INCa_0614) Molecular and functional analysis of leukemia-initiating cells in human T-cell acute lymphoblastic leukemias
0.41 NCI (2010) None Identifying the spectrum of genetic alterations in high risk ALL

(INCa_0615) Prospective translational study of genetic mutations in matched tumor and plasma specimens in phase 1 patients population.

(INCa_0617) Enumeration and characterization of antigen-specific naïve CD8+ T cells present in human peripheral blood

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(INCa_0620) Effect of temporal parameters of irradiation on mechanisms of radiation-induced fibrosis

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(INCa_0624) Effect of retinoic acid on the immune response in acute myeloid leukaemia and myelodysplasic syndromes in animal models and in patients

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(INCa_0625) Alterations of cAMP signaling in adrenocortical tumorigenesis: study of phosphodiesterase 11A
0.41 NICHD (2010) None Molecular Genetics Of Adrenocortical Tumors And Related Disorders

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(INCa_0627) Investigation of the IGF1 and TGFbeta signalling pathways and of the modulation of these pathways in Ewing's sarcoma.

(INCa_0628) Validation of new biomarkers and therapeutic targets in childhood malignant gliomas
0.43 NCI (2009) P01CA096832 Molecular Pathogenesis of Pediatric High-grade Glioma

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(INCa_0637) "Study and interest of CXCL4, CXCL4L1 and CXCR3 in clear cell Renal Cell Carcinoma."

(INCa_0639) Role of DNA repair gene polymorphisms in the efficiency of cisplatin-based adjuvant chemotherapy of non-small cell lung cancer

(INCa_0644) Generation of a bank of breast cancer xenografts
0.56 NCI (2008) R01CA118740 Experimental Modeling of Human Breast Cancer in Mice
0.56 NCI (2009) R01CA118740 Experimental Modeling of Human Breast Cancer in Mice
0.55 NCI (2010) None Schweinfurthins: novel treatment for breast cancer
0.55 NCI (2010) None Oncopigs as a better model for human cancer
0.55 NCI (2010) None Understanding and preventing breast cancer disparties in Latinas
0.54 NCI (2010) None TAS::75 0849::TAS THE CONTRACTOR PROPOSES STUDIES FOR THE PRECLINICAL DEVELOPME
0.54 NCI (2009) U01CA141539 Immune diagnostics and vaccine targets: breast cancer antigens from mice to women
0.54 NIGMS (2008) SC3GM084824 Molecular targets of soy isoflavones in breast cancer progression
0.54 NCI (2009) F32CA139931 The role of DEK in breast cancer development and therapy
0.54 NCRR (2009) M01RR000043 BLOOD TUMOR MARKERS FOR MOLECULAR DIAGNOSIS OF BREAST DISEASE AND MONITORING
0.53 NCI (2008) R01CA125577 Role of CCN6 (WISP3) in the progression and metastasis of breast cancer
0.53 NCI (2008) P50CA058223 Career Development Program
0.53 NCI (2008) R01CA113750 Stem-like Cancer Cells in Breast Tumorigenesis
0.53 NCI (2010) R21CA139396 Genetic Variation Affecting Epigenome and Breast Cancer Susceptibility
0.53 NCI (2011) R21CA157168 A novel biomarker and therapeutic target for breast cancer
0.53 NCI (2010) None Development of recombinant rhTL1A protein for cancer treatment
0.52 NCI (2008) R01CA118764 Molecular regulation of breast cancer growth
0.52 NCI (2009) R21CA133597 Abi pathway in Breast Cancer Metastasis
0.51 NCI (2009) U54CA143931 Charles Drew University/UCLA Cancer Center Partnership to Eliminate Cancer Health

(INCa_0651) "Genomics and Functions of genes associated with predisposition to Lung Cancer : biological, pathological and clinical significance"
0.47 NCI (2008) P50CA090440 SPORE in Lung Cancer
0.47 None (2011) I01CX000333 The role of Vitamin D metabolism in Non-Small Cell Lung Cancer
0.46 NCI (2011) R01CA164783 Molecular biomarkers of airway and lung linking COPD and Lung Cancer
0.46 NCI (2008) P50CA070907 University of Texas SPORE in Lung Cancer
0.46 NCI (2008) R01CA119029 Development of DNA Methylation Markers for Early Detection of Lung Cancer
0.45 NCI (2011) P50CA090440 SPORE in Lung Cancer
0.45 NCI (2010) None Administrative Core
0.44 NCI (2010) None Transdisciplinary Research in Cancer of the Lung (TRICL)
0.44 NCI (2011) R01CA151601 Nicotine, nicotinic receptors and lung cancer
0.44 NCI (2009) R43CA141786 Identification of microRNA Biomarkers for Lung Cancer
0.44 NCI (2008) R21CA129913 The Role of Memory T-Cells in Pathogenesis
0.44 NCI (2009) P50CA090578 Foxa2 and C/EBP transcription factors in the pathogenesis and treatment of lung c
0.43 NCI (2009) R44CA139803 Field of Injury Based Biomarkers for Lung Cancer
0.43 NCI (2008) R03CA125796 Nutrient Flavonoids and Lung Cancer Prevention
0.43 NCI (2008) K07CA125203 Exploring Common Linkage Regions in Lung Cancer and COPD
0.43 NCI (2010) None An Integrated Nano-Cell Delivery Platform of Theranostics for Lung Cancers

0.43 NIEHS (2008) R03ES016888 Roles of Claudin-7 in Lung Cancer
0.43 NCI (2009) P50CA058184 P2: Gene Promoter Hypermethylation as a Biomarker for Lung Cancer Detection
0.42 NCI (2008) Z01BC010448 Genetic Alterations in Lung Cancer

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(INCa_0657) "Towards a cognitive classification of T cell lymphomas: correlation of transcriptional profiling, CGH arrays, mi-RNA and epigenetic analysis"

(INCa_0658) Immune B-cell memory and indolent B-cell lymphomas originating from marginal zones
0.41 NCI (2009) P01CA092625 PROGRAM PROJECT GRANT: Molecular Targets of Germinal Center B-Cell Lymphomas

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(INCa_0659) Optimization of Rituximab therapy (RITUXOP)

(INCa_0669) Longitudinal study about the relation of couple of women with a pelvis cancer: impact on the sexuality (Exploratory study)

(INCa_0673) "Genomic exploration of malignant plasma cells and their microenvironment in multiple myeloma : a prospective study to find out predictors for the treatment response, the pharmacotoxicology and the impact on bone biology."

(INCa_0680) Optimization of gamma/delta T cell based immunotherapy : proof of concept and preclinical feasability

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(INCa_0700) Epidemiological detailed characteristics of lymphoid neoplasms in France in 2006-2008

(INCa_0706) Role of neutrophils in the antitumoral effect of a lipid A

(INCa_0707) Transcriptional responses to retinoic acid signalling: pro and anti-oncogenic effects

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(INCa_0713) Study of genome instability through three cancer prone repair deficient genetic disorders
0.48 NCI (2011) ZIABC004517 DNA Repair in Human Cancer-Prone Genetic Diseases
0.47 NIEHS (2011) F31ES019823 Role of poly (ADP-ribose)in the Repair of Ultraviolet Induced DNA Damage
0.46 NCI (2008) Z01BC004517 DNA Repair in Human Cancer-Prone Genetic Diseases
0.45 NCI (2008) R21CA128628 Development of methodologies for the analysis of DNA repair capacity to predict t
0.45 NIEHS (2010) None SWI/SNF chromatin remodeling in nucleotide excision repair
0.44 NIGMS (2008) R01GM080454 Coordination of the late steps of human nucleotide excision repair
0.44 NIGMS (2008) SC2GM081155 Temporal and Spatial Relationships of Proteins in Yeast NER
0.44 NIGMS (2008) SC2GM081155 Temporal and Spatial Relationships of Proteins in Yeast NER
0.44 NCI (2008) R01CA105069 DNA Repair, Skin Cancer and Overall Cancer Risk
0.43 NCI (2008) R01CA100264 Genetic Predictors for DNA Repair Phenotype in CMM
0.43 NIGMS (2008) R01GM071760 Role of HMGA1 proteins in DNA damage and excision repair
0.42 NCRR (2009) P20RR016478 THE ROLE OF MMS19 IN DNA REPAIR AND TRANSCRIPTION
0.42 NIEHS (2008) R37ES002614 Repair of Carcinogen Damaged DNA in Human Chromatin

0.42 NCI (2008) R37CA041261 Repair of UV irradiated DNA: excision genes of yeast
0.42 NIEHS (2008) Z01ES061060 Mechanistic Studies Of Excision Repair Proteins
0.41 NIEHS (2011) R01ES019566 DNA damage recognition by nucleotide excision repair proteins

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(INCa_0714) A Protein bioMarker Signature for Improving Colorectal Cancer Screening.
0.48 NCI (2011) ZIABC004517 DNA Repair in Human Cancer-Prone Genetic Diseases
0.46 NIEHS (2011) F31ES019823 Role of poly (ADP-ribose)in the Repair of Ultraviolet Induced DNA Damage
0.45 NCI (2008) Z01BC004517 DNA Repair in Human Cancer-Prone Genetic Diseases
0.44 NIGMS (2008) SC2GM081155 Temporal and Spatial Relationships of Proteins in Yeast NER
0.44 NIGMS (2008) SC2GM081155 Temporal and Spatial Relationships of Proteins in Yeast NER
0.44 NIEHS (2010) None SWI/SNF chromatin remodeling in nucleotide excision repair
0.44 NCI (2008) R21CA128628 Development of methodologies for the analysis of DNA repair capacity to predict t
0.44 NIGMS (2008) R01GM080454 Coordination of the late steps of human nucleotide excision repair
0.44 NCI (2008) R01CA105069 DNA Repair, Skin Cancer and Overall Cancer Risk
0.42 NCRR (2009) P20RR016478 THE ROLE OF MMS19 IN DNA REPAIR AND TRANSCRIPTION
0.42 NIGMS (2008) R01GM071760 Role of HMGA1 proteins in DNA damage and excision repair
0.41 NCI (2008) R37CA041261 Repair of UV irradiated DNA: excision genes of yeast
0.41 NIEHS (2008) Z01ES061060 Mechanistic Studies Of Excision Repair Proteins
0.41 NIEHS (2008) R37ES002614 Repair of Carcinogen Damaged DNA in Human Chromatin

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(INCa_0716) Understanding the pathways of leukemogenesis controlled by the Ikaros tumor suppressor
0.72 NHLBI (2009) R01HL095120 The Role of Zinc Finger Genes in Leukemogenesis
0.70 NCI (2011) R01CA162092 Ikaros regulation: study on hemo-lymphopoiesis
0.69 NIAID (2009) R21AI078146 The role of Ikaros in regulation of Notch target gene expression
0.67 NIDDK (2008) K01DK064828 HETEROCHROMATIN RECRUITMENT OF THE VPAC1 LOCUS BY IKAROS
0.67 NCI (2011) R01CA154998 Transponson-based screens for genes involved in acute lymphoblastic Leukemia
0.65 NIDDK (2011) R01DK043726 Biological functions and mechanisms of action of Ikaros proteins
0.63 NIAID (2011) R03AI094199 Generation of Ikaros conditional knockout mice
0.60 NIAID (2008) R56AI042254 Ikaros and Mi-2 beta interactions in early lymphoid development
0.57 NINDS (2008) F31NS058941 Regulation of polarized Th responses in EAE by Ikaros
0.56 NIAID (2010) None Ikaros in mast vs. basophil lineage choice
0.55 NIAID (2009) R01AI042254 Ikaros and Mi-2 beta interactions in early lymphoid development
0.51 NIDDK (2008) R01DK043726 Regulation of TDT expression during lymphopoiesis
0.48 NIAID (2008) R37AI033062 Ikaros regulation: study on hemo-lymphopoiesis
0.46 NIEHS (2008) F30ES015971 The Role of Ikaros in Regulatory T Cells that Protect Against Allergic Asthma

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(INCa_0717) Exosome biogenesis and use in immunotherapy against tumors
0.55 NCCAM (2009) R01AT004294 Curcumin reverses tumor exosomes-mediated inhibition of myeloid differentiation
0.53 NIGMS (2008) R01GM072820 Compartmentalized Exosome Structure and Function
0.51 NCI (2008) R01CA116092 Breast tumor exosomal Jak3BP mediated immunosuppression
0.51 NCRR (2011) P41RR001646 STRUCTURES OF EXOSOME AND SIGNAL RECOGNITION PARTICLE
0.51 NCRR (2009) P41RR001646 STRUCTURES OF EXOSOME AND SIGNAL RECOGNITION PARTICLE
0.50 NEI (2009) R01EY012797 MOLECULAR BASIS OF MYOCILIN FUNCTION IN THE HUMAN EYE

0.50 NIAID (2011) R21AI095023 The Role of Exosomes in Semen for HIV Infection in the Genital Mucosa of Women
0.49 None (2011) I01BX000962 Exosomal TRAF2-CSN5 complex mediated inflammation promotes tumor growth
0.48 NIGMS (2008) R01GM079196 Structural and Functional Studies of Eukaryotic Exosomes
0.48 NCI (2011) U54CA163069 Analysis of Serum Exsomes in Patients with Colorectal and Breast Cancer
0.48 NCI (2009) R01CA137037 lung tumor exosome-mediated inflammation promotes tumor progression and growth
0.47 NHLBI (2008) Z01HL002544 Regulation of Cytokine-Mediated Lung Inflammation
0.46 NCRR (2009) P41RR011823 SALIVARY GLAND EXOSOME PROTEOME
0.46 NHLBI (2010) None Regulation of Cytokine-Mediated Lung Inflammation
0.46 NCI (2009) R01CA046413 Role of EGFR Ligands in Neoplasia
0.46 NHLBI (2011) ZIAHL002544 Regulation of Cytokine-Mediated Lung Inflammation
0.44 NIDDK (2008) F30DK082217 IL-4 Overexpressing Dendritic Cells and Exosomes for Treatment of Type 1 Diabetes
0.44 NCI (2011) R03CA156667 Proteomic and lipidomic profiling of tumor-derived exosomes for cancer prevention
0.44 NIGMS (2008) R01GM068758 REGULATION OF EXOSOME-MEDIATED MAMMALIAN mRNA TURNOVER

(INCa_0720) Study of ubiqitination/deubiquitination of chromatin in tumor cells and the development of small molecule inhibitors that inhibit cell proliferation
0.47 NCI (2008) R01CA109355 Functions of Histone Ubiquitination and Methylation
0.45 NCI (2009) R01CA139322 Cell Cycle Regulation of Histone Gene Expression
0.45 OD (2008) R56DK082673 Characterization of a novel histone H3 phosphorylation mark in DNA replication
0.45 NIDDK (2009) R01DK077036 Histone Demethylation A Novel Mechanism in Hormone-Mediated Gene Regulation
0.44 NIDDK (2009) R21DK082476 Novel histone biotinylation sites and relationships to other epigenetic marks
0.44 NIGMS (2011) R01GM098870 Dynamic Regulation of Methyl-arginine and Citrulline in Breast Cancer Cells
0.44 OD (2009) R03DA027715 Discovering Inhibitors of histone demethylase GASC-1
0.44 NCI (2008) P01CA101956 Histone Modification and Changes in Chromatin: Silencing of Tumor Suppressor Gene
0.43 NIGMS (2008) R01GM055712 DNA replication linked chromatin assembly in yeast
0.43 OD (2008) R21DK082706 Identification of novel histone modifications in a model eukaryote
0.43 NIGMS (2008) R01GM064844 Repression via Facultative Heterochomatin
0.43 NIGMS (2008) R01GM079223 Computational Studies of Histone Modifications
0.43 OD (2010) None Novel Methodology for Quantitative High-throughput Cancer Epigenetics
0.43 NIGMS (2010) R01GM040922 Enzymology and Function(s) of Histone Phosphorylation
0.43 NIGMS (2008) R37GM053512 Deciphering the Histone Code
0.42 OD (2009) R21DK082634 Identification of Histone Modification Interaction Networks
0.42 NIDCR (2010) R01DE016513 Molecular Regulation of Human Dental Stem Cell Properties
0.42 NIGMS (2011) R01GM095822 Structure and Function of the SAGA Deubiquitinating Module
0.42 NIGMS (2008) R01GM065385 Histone Nuclear Import and Chromatin Assembly

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(INCa_0726) Long-term quality of life after breast cancer: a registry-based controlled study.
0.46 NCI (2008) Z01CP010182 Epidemiologic Field Studies
0.45 NCI (2008) R01CA106979 Impact of Breast Cancer on Older Survivors

0.45 NCRR (2010) None CANCER RESEARCH CENTER
0.45 None (2009) U01DP000260 Breast and Prostate Cancer Patterns of Care
0.45 NCI (2009) ZIACP010182 Epidemiologic Field Studies
0.45 NCI (2010) None Comorbid Conditions in Cancer Survivors: Costs and Quality of Care
0.44 NCI (2010) None Epidemiologic Field Studies
0.44 NCRR (2011) G12RR003035 CANCER RESEARCH UNIT
0.44 NCI (2008) R03CA132575 Cardiovascular Risk Factors and Lifestyle Modification in Breast Cancer Survivors
0.43 NCI (2010) None Epidemiology
0.43 FIC (2009) D43TW008325 Planning Grant: Cancer Research Training in Morocco
0.43 NCI (2008) K05CA092395 Cancer Control in Older Adults
0.43 NCRR (2009) M01RR010284 PAABCS
0.43 FIC (2011) D43TW009084 Research Training in Cancer Prevention and Control in Morocco
0.43 NCI (2009) R01CA067264 Breast Carcinoma in situ: Predicting Risk and Outcomes
0.43 NCI (2011) P30CA016086 Epidemiology
0.43 NCI (2010) R21CA143242 Algorithms to Identify Second Breast Cancer Events from Electronic Data
0.42 NCI (2010) R21CA139396 Genetic Variation Affecting Epigenome and Breast Cancer Susceptibility
0.42 NCI (2011) 261200800015I-0-26100004-1 Meeting Support Services for the Applied Research Program

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(INCa_0727) Role of APPBP1 in radiosensitivity of HPV-induced oropharyngeal tumors
0.54 NCI (2009) N01PC35139 RRSS #08: Evaluating Prevalence HPV Infection Among Head and Neck Cancer Patients
0.54 NCI (2011) R01CA158286 Integrative epigenomic/genomic profiling and biomarker discovery in HPV+ and HPV-
0.53 NIDCR (2008) R01DE017315 Mouse Model for Human Papillomaviral (HPV)-associated Oral Cancer
0.52 NIDCR (2008) R01DE018386 Mechanisms of invasion for an HIV related head and neck cancer
0.50 NCI (2011) K99CA160639 Head and Neck squamous cell carcinoma radiation response modulation by HPV
0.49 NCI (2011) K08CA149078 Mechanism of Radiation Mediated Clearance of HPV Positive Head and Neck Cancer
0.47 NIAID (2008) R21AI078489 New Cellular Effectors of Human Papillomavirus E7 Activity
0.47 NCI (2008) P01CA042792 HPV: Biology, Clinical Significance and Epidemiology
0.47 NCI (2009) P01CA022443 Molecular Genetics of Human Papillomavirus Infection and Oncogenesis
0.47 NIDCR (2008) R01DE016631 Oral HPV Infection in HIV-Infected Men and Women
0.47 NIDCD (2010) None The Role of Rac1 in HPV-induced Recurrent Respiratory Papillomatosis
0.46 NIGMS (2010) SC2AI090922 Anogenital HPV Infection in a Population-Based Sample of Puerto Rican Women
0.46 NCI (2011) R21CA152785 Prospective Oral HPV and Risk of Head and Neck Cancers
0.46 NCI (2010) R01CA098803 Natural History of HPV Infection in Men: The HIM Study
0.46 NICHD (2009) R03HD058771 Disclosure of High-Risk HPV Infection to Sex Partners of Young Men
0.45 NCI (2009) P01CA050661 Papillomavirus E2 Growth Suppression Mechanisms
0.45 NCI (2008) P01CA042792 EPIDEMIOLOGY OF HPV-RELATED SCSC IN TRANSPLANT PATIENTS
0.45 NCI (2008) P01CA050661 Cellular Targets of Papillomavirus Oncoproteins
0.45 OD (2011) R21CA167652 Incidence of HIV among Indian men who have sex with men

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(INCa_0729) Polymorphism of TLR4 in prognosis and response to treatment of patients with colon cancer state II or III: population based study.

(INCa_0739) Comparison of two immunological tests of occultblood testing in stools with automated analyzers for colorectal cancer screening

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(INCa_0748) Tumor dormancy in acute myeloblastic leukemia: phenotypic and genotypic characterisation of leukemic cells and study of factors involved in tumor dormancy

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(INCa_0752) Metabolic signatures of endocrine tumors using high field NMR

(INCa_0759) Functional and phenotypic evaluation of intratumoral plasmacytoid dendritic cells (pDC) and regulatory T lymphocytes (Treg) in ovarian cancer
0.55 NCI (2009) R01CA126841 Regulatory T Cell Function in Ovarian Cancer
0.46 NCI (2009) P01CA128913 Activation of pDCs in Murine Tumor Models
0.45 NCI (2008) R01CA099985 Human Tregs in Ovarian Cancer
0.45 NCI (2009) P50CA136393 Mechanisms of Immune Suppression in Ovarian Cancer
0.44 NCI (2010) R01CA099985 Human Tregs in Ovarian Cancer
0.44 NCI (2010) None Induction of an Antitumor Immune Response in Patients with Melanoma
0.43 None (2010) None PHASE II TRIAL OF ONTAK TO TREAT OVARIAN CANCER UNDER B*
0.43 NIA (2010) None The role of immunosuppressive cells in metastasis
0.42 NIAID (2010) None Modulating anti-HIV immunity by plasmacytoid dendritic cells
0.41 NCI (2009) R01CA103320 IDO-expressing immunoregulatory dendritic cells
0.41 NIA (2011) ZIAAG000443 Regulatory immune cells in immune suppression and metastasis
0.41 NCI (2011) R01CA156685 Hypoxia and Regulatory T cells in Cancer
0.41 NCI (2008) P50CA126752 Regulatory T Cells and Toll-Like Receptor Signaling in Lymphoma Therapy
0.41 NIA (2009) ZIAAG000443 The role of immunosuppressive cells in metastasis
0.40 NIAID (2008) R01AI058156 Analysis of Lag-3 in Regulatory T cell Function
0.40 NCI (2009) P01CA128913 Activation of Intratumoral pDCs by Tumor Self-DNA Coupled with Anti-microbial

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(INCa_0777) Role of ribosomal alterations and translational specificity in tumorigenesis
0.59 NCI (2008) R01CA123391 Growth Control and Anti-Cancer Mechanisms
0.58 NIGMS (2010) R01GM052581 The Architecture and Function of RNPs Required for Ribosome Biogenesis
0.56 NIGMS (2009) R01GM028301 Yeast Ribosome Biogenesis
0.55 NCRR (2009) P41RR011823 YEAST RIBOSOME BIOGENESIS
0.55 NIGMS (2010) None Assembling an understanding of Ribosome Biogenesis
0.54 NIGMS (2008) R01GM058859 Translational Fidelity in Eukaryotes
0.54 NIGMS (2008) R01GM074091 Monitoring mechanisms in mammalian ribosome biogenesis
0.52 NIAAA (2011) F31AA019842 The Role of Ribosome Biogenesis Factors in Liver Cirrhosis
0.51 NIGMS (2010) R01GM072528 Molecular analysis of accurate ribosomal translocation
0.51 NIGMS (2009) R01GM065050 Atomic resolution structure and function of the ribosome
0.51 NIGMS (2011) R01GM074091 Monitoring mechanisms in mammalian ribosome biogenesis
0.51 NIGMS (2009) R01GM087596 The Role of Ribosomal RNA Modifications
0.51 NCRR (2009) P41RR001209 STRUCTURES OF THE E COLI 70S RIBOSOME IN FUNCTIONAL COMPLEXES
0.50 NIGMS (2009) R01GM058859 Translational Fidelity in Eukaryotes
0.50 NIGMS (2008) R01GM017129 Ribosome Structure and Function
0.50 NIGMS (2008) R01GM059140 Crystal Structure of the Ribosome
0.50 NIGMS (2009) R00GM081450 Toward construction of a synthetic self-replicating entity

0.49 NIGMS (2011) R01GM078634 Molecular determinants of A-site mRNA cleavage during ribosome pausing
0.49 NIGMS (2008) R01GM065050 Atomic-resolution structure and function of the ribosome

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(INCa_0779) Assessment of the response of normal and tumour human brain cells to anti-glioma treatments
0.41 NINDS (2008) R01NS051520 PTP mu Supresses Brain Tumor Cell Migration and Dispersal

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(INCa_0782) Telomere functions as targets for new therapeutic approaches against cancer
0.56 NCI (2011) R01CA133249 Mechanism and Consequences of Telomere Dysfunction
0.53 NIGMS (2011) R15GM099008 Mechanism for Telomeric G-overhang Generation in Human Cells
0.52 NCI (2010) None Control of Telomere Heterochromatin by TERRA
0.51 NCI (2008) R15CA132090 Function of human FEN1 in telomere maintenance
0.51 NCI (2008) R01CA096840 Cancer cell telomere dynamics and responses to perturbations
0.51 NIGMS (2010) F32GM090764 Protein composition and interactions of telemeric chromatin
0.51 NIGMS (2008) R37GM049046 Molecular cytology of human telomeres-telomere protein
0.50 NIGMS (2008) R01GM043265 Structure and Behaviour of Yeast Telomeres
0.50 NCI (2009) R01CA095099 Mechanisms of Telomere Function
0.50 NCI (2008) R01CA082481 The Molecular Basis of Telomerase Function &Regulation
0.50 NIGMS (2011) R01GM065383 Telomere structure and function in Arabidopsis
0.50 NCI (2008) R01CA111691 Telomeres, Telomerase and Tumor Progression
0.50 NIGMS (2011) R01GM026259 The function of telomerase and telomeres
0.50 NCI (2009) R01CA140730 Use of aptamers in dissecting the HSF-regulated cancer-enabling network
0.49 NIGMS (2009) R01GM084361 Epigenetic Regulation of Drosophila Telomere Function
0.49 NIA (2009) R01AG021521 Telomere maintainance by werner syndrome family proteins
0.49 NIA (2009) F31AG035480 The Role of Timeless Tipin in Telomere Length Control and Maintenance
0.49 NIGMS (2008) R01GM078253 Roles of Checkpoint and DNA Repair Proteins in Fission Yeast Telomere Maintenance
0.49 NIGMS (2008) R01GM065383 Telomere structure and function in Arabidopsis

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(INCa_0794) Molecular epidemiology of sarcomas in the Rhone-Alpes region: 2005-2006

(INCa_0795) Gene-smoking and gene-occupation interactions in lung carcinogenesis
0.47 NCI (2011) ZIACP005804 Pharmacogenetic Studies
0.45 NCI (2010) None Multiethnic Genome Scan of Metabolic Phenotypes
0.42 NCI (2010) None Epidemiologic Architedure of Lung Cancer and Smoking
0.41 NCI (2008) R01CA106815 Lung cancer molecular markers by sex: intergroup study
0.40 NCI (2008) R01CA120126 Modeling the Impact and Costs of Radon Policy for Lung Cancer Control
0.40 NCI (2008) R01CA127219 Inflammation Genes and Lung Cancer Risk

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(INCa_0810) Hypoxia and tumour progression: interest of CAIX and CAXII as independent prognostic biomarkers in non-small cell lung carcinoma

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(INCa_0811) Genomic and functional characterisation of adipocytic tumours: study of HMGA2 gene expression and let-7 micro-RNA and identification of new target oncogenes in well-differentiated and dedifferentiated liposarcomas

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(INCa_0815) Follicular Lymphomagenesis: Early Steps & Early Niches

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(INCa_0820) Deciphering the signaling network controling melanoma development
0.53 NIAMS (2008) R01AR043369 Mitf: A Master Gene for Melanocyte Development
0.52 NCI (2009) R01CA099961 ATF2 in melanoma development and progression
0.51 NCI (2009) P50CA093683 Molecular Signatures of Melanoma: Predicting Response to Therapy &Targeting
0.50 NCRR (2009) M01RR000043 DETECTION OF CELLULAR/IMMUNE RESPONSES TO MITF IN NORMAL SUBJECTS AND
0.48 NHLBI (2008) R01HL077178 Genetic networks that regulate the mast lineage
0.46 NIAMS (2010) None Regulation of Melanocyte Differentiation by SWI/SNF Chromatin Remodeling Enzymes
0.46 NIGMS (2008) SC2CA138175 Generation of an UV-dependent Mouse Model of Melanoma
0.45 NEI (2008) R01EY016398 Molecular Mechanisms Regulating VMD2 Expression
0.44 NCI (2008) R01CA124975 Validation of Grm1 as a Therapeutic Target in Melanoma
0.44 NCI (2008) R01CA124975 Validation of Grm1 as a Therapeutic Target in Melanoma
0.44 NCI (2010) None Combination Therapy that Targets Glutamate Signaling in Melanoma
0.43 NCI (2009) R01CA137365 Molecular signatures of melanoma histology and progression: A Population Based A
0.42 NCI (2010) None Mechanism of Resistance to Arginine Deiminase Therapy in Advance Melanoma
0.42 NHGRI (2011) ZIAHG200337 Mutational and Functional Analysis of Sporadic Malignant Melanoma
0.42 NCRR (2011) P20RR016472 DIRECT INTERACTION OF ERISTOSTATIN WITH MELANOMA CELL SURFACE MOLECULES
0.42 NINDS (2010) None Transcription Regulation In Vertebrate Eye Development
0.42 NCI (2008) P01CA025874 Human Melanoma - Etiology, Progression and Therapy
0.42 NCI (2008) R01CA122484 Targeting Glycolytic Control of Melanoma Cell Survival
0.41 NCI (2010) None The role of c-Met expression in melanoma growth and migration

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(INCa_0826) Role of transcription factor SF-1 and its target genes in adrenocortical tumorigenesis
0.53 NICHD (2008) R01HD046743 Steroidogenic Factor 1: Mediator of Gonadal Function
0.51 NIDDK (2008) F32DK082100 Modifying SF-1 Transcriptional Programs by Sumoylation
0.48 NIDDK (2008) R01DK070024 Modulating Nuclear Receptor Activity via Sumoylation
0.43 NIGMS (2010) None Regulation of Steroidogenic Genes by Trophic Hormones
0.42 NIDDK (2010) None Nuclear Lipids in Steroidogenesis
0.41 NIGMS (2008) R01GM073241 Regulation of Steroidogenic Genes by Trophic Hormones
0.41 NIEHS (2009) R21ES017136 Molecular Mechanisms of Atrazine in Altering the Endocrine Gene Network
0.41 OD (2009) R56GM073241 Regulation of Steroidogenic Genes by Trophic Hormones

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(INCa_0834) Deregulation of the EGFR / Src / Cortactin Axis : Targeting the Invasive Phenotype of hEad and neck cancer
0.49 NCI (2008) R01CA077308 STAT Mediated TGF-a/EGFR Signaling in squamous cell carcinomas of the head &neck
0.48 NCI (2008) P50CA097190 TARGETING EGFR AND GPCR SIGNALING IN SCCHN
0.47 NIDCR (2010) None PARD3 Alterations, Circulating Tumors Cells and Metastasis in Head and Neck Cance
0.46 NCI (2009) R01CA098372 GPCR Signaling in SCCHN: Integration with EGFR
0.46 NCI (2008) R01CA045726 Regulation of metastasis by alpha V integrin and Src
0.44 NCI (2010) None Therapeutic Mechanisms of Co-Targeting of EGFR and Src Family Kinases
0.44 NCI (2008) R01CA098372 GRPR Signaling in SCCHN: Integration with EGFR
0.43 NCI (2008) R01CA058626 Regulation of Fibronectin Matrix Assembly by uPAR

0.42 NIDCR (2010) None Cortactin Binding Partners in HNSCC Phenotypes
0.41 NCI (2008) R01CA115902 Chemokine Signals in Head and Neck Cancer Progression
0.41 NCI (2008) R21CA130241 EGFR antisense DNA added to cetuximab and radiotherapy for head and neck cancer
0.40 NIDCR (2011) F31DE020223 EGFRvIII expression, signaling and treatment in SCC of the head and neck
0.40 NIDCR (2009) RC1DE020332 Development and Profiling of Human-in-Mouse Models of Salivary Carcinomas
0.40 NIDCR (2010) None EGFRvIII expression, signaling and treatment in SCC of the head and neck

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(INCa_0839) "Preventive behaviours and attitudes towards reproductive technologies (PGD , PND) of families with a genetic predisposition to hereditary breast ovarian cancer (BRCA1/2 mutations)"
0.42 NHGRI (2008) R03HG004528 Attitudes Regarding Prenatal and Preimplantation Genetic Diagnosis For Inherited
0.42 NCI (2008) R01CA128978 A genome-wide association study for breast cancer in BRCA1 mutation carriers
0.42 NCI (2011) R03CA157212 Adherence to Cancer Risk Management Among Unaffected BRCA1/2Mutation Carriers
0.41 NCI (2008) R01CA083855 Prophytactic surgery in carriers of BRCA 1/2 mutations
0.40 NCI (2011) R01CA159868 Genes, environment and breast cancer risk: The 15 year follow-up of the Prof-SC

(INCa_0843) "Cancer patients' quality of life two years after diagnosis: a secondary analysis of the ALD-Cancer survey for six cancer localisations (Breast, Prostate, Colon-rectum, Upper Aero Digestive Tract, Lung and non leukemic haematological malignancies."
0.54 FIC (2009) D43TW008325 Planning Grant: Cancer Research Training in Morocco
0.54 FIC (2011) D43TW009084 Research Training in Cancer Prevention and Control in Morocco
0.53 NCRR (2010) None CANCER RESEARCH CENTER
0.52 NCRR (2011) G12RR003035 CANCER RESEARCH UNIT
0.52 NCMHD (2010) None Cancer
0.49 NCI (2010) None Surveillance, Epidemiology and End Results (SEER) - USC
0.49 NCI (2010) None TAS::75 0849::TAS
0.49 None (2009) U01DP000253 Breast and Prostate Cancer Data Quality and Patterns of Care Study
0.48 NCI (2009) 261200800001E-12-0-36 Repository Services for epidemiology studies
0.48 NCI (2010) None Molecular Therapies of Cancer Scientific Program
0.47 None (2009) I01RX000104 Veterans? Cancer Rehabilitation Study
0.47 NCI (2010) None TAS::75 0849::TAS
0.47 NCI (2008) P30CA060553 The Robert H. Lurie Comprehensive Cancer Center
0.47 NCI (2011) P30CA086862 Cancer Epidemiology
0.47 NCI (2008) P30CA060553 The Robert H. Lurie Comprehensive Cancer Center
0.47 NCI (2009) P30CA086862 Cancer Epidemiology
0.47 NCI (2008) K07CA101780 Breast and Cervical Cancer Screening in Obese Women
0.46 NCI (2008) P30CA015083 Mayo Comprehensive Cancer Center Grant
0.46 NCI (2008) P30CA016059 Massey Cancer Center Core Support

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(INCa_0849) Genetic alterations in the plasma of patients with colorectal cancers stage II-III: prognosis forecast

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(INCa_0855) Experience and status of the patients in clinical cancer research in France

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(INCa_0859) "Mantle cell lymphoma : an integrative research project on epidemiology, lymphomagenesis, and treatment"
0.43 NCI (2009) R21CA133963 Murine Models for Mantle Cell Lymphoma: The role of tumor initiating cells (TIC)
0.42 NCI (2008) R01CA116093 Effects of human SWI/SNF-associated PRMT5 on lymphomagenesis
0.41 NCI (2009) K01CA138559 Antibody-mediated Gene Therapy for the Treatment of Cancer
0.41 NCI (2008) R43CA134108 Development of a Small Molecule-Targeted Therapy for Mantle Cell Lymphoma
0.41 NCI (2009) R01CA137123 Tageting BAFF and BAFF-Induced Non-Canonical NF-kB Pathways for Enhancing Mantle

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(INCa_0867) "Study of Sphingosine-1-Phosphate (S1P) as a specific radioprotector of the small intestine (critical organ) during abdomino-pelvic high dose hypofractionated irradiations, without any protection of targeted tumoral tissues "
0.47 NCRR (2009) P51RR000163 PRE-CLINICAL TRIALS FOR FEMALE FERTILITY PRESERVATION
0.47 NCRR (2011) P51RR000163 PRE-CLINICAL TRIALS FOR FEMALE FERTILITY PRESERVATION
0.47 NIAID (2011) R01AI085166 Control of sphingosine-1-phosphate distribution.
0.46 NCI (2008) R01CA104834 Alkaline Ceramidase and Sphingolipid Signaling
0.46 NIAID (2009) R01AI079665 Targeting the processing of the arenavirus glycoprotein for anti-viral therapy.
0.46 NIGMS (2011) R01GM067958 Molecular Pharmacology of Sphingosine 1-Phosphate
0.46 NIAID (2009) RC1AI078516 Endogenous sphingosine-1-phosphate as a radioprotector of intestinal tissues
0.46 NHLBI (2008) R01HL080404 Sphingosine-1-phosophate signaling in vasculogenesis
0.45 NHLBI (2011) P01HL098050 Role of Sphingolipids in the Pathobiology of Lung Injury
0.44 NCI (2011) R01CA061774 Sphingosine kinases in cancer cell signaling
0.44 NCI (2009) R44CA110298 Commercialization of ASONEP for the Treatment of Cancer
0.44 NINDS (2008) R01NS049263 Neural derived S1P and Endothelial Function in Stroke
0.44 NHLBI (2008) R01HL079396 Intracellular S1P &signaling in lung endothelial cells
0.43 NHLBI (2009) R01HL090606 Sphingosine 1-phosphate and cardioprotection
0.43 NIGMS (2008) R01GM062887 Sphingosine Phosphate Role in Inflammation
0.43 NINDS (2008) P01NS055104 Autocrine and paracrine lipid modulators in brain function and disease
0.42 NHLBI (2009) R21HL094883 HDL-Associated S1P as an Indicator of Relative Risk for Cardiovascular Disease
0.42 NIGMS (2008) R37GM043880 Roles of sphingosine-1 phosphate phosphohydrolase
0.42 NIDDK (2008) K08DK070468 Sphingolipid Signaling in Wilms' Tumor Cells

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(INCa_0870) Combining external beam radiotherapy with virally-directed radioisotope uptake and novel radiosensitizers
0.42 NCI (2008) P01CA097012 Improved Gene Delivery and In Vivo Imaging

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(INCa_0874) Human Papillomavirus DNA testing using self-collected samples for cervical cancer screening: an alternative strategy for unscreened women?
0.49 NCI (2010) None Pilot Project
0.46 NCI (2010) None ENHANCING CERVICAL CANCER PREVENTION STRATEGIES AMONG HOPI WOMEN AND ADOLES...
0.46 FIC (2008) R03TW007662 Men &Women's Social-Cultural Factors Assoc w/Cervical Cancer Prevention in Panam
0.46 NIAID (2008) K01AI079270 HPV Infections in Older Women

0.46 NIAID (2010) F31AI086071 Self-collection for HPV in 18-24 year-old women who date online
0.45 NIAID (2010) None Natural History of HPV Infections in Mid-adult Women
0.45 NCI (2011) U54CA164336 New Mexico HPV Outcomes, Practice Effectiveness and Surveillance (NM-HOPES)
0.44 NCI (2010) None Research Project
0.44 NCI (2010) None Cervical cancer and human papillomavirus (HPV) infection
0.44 NIAID (2010) None HPV Disease in the Era of HPV Vaccines
0.44 NCI (2010) None Evaluation of a Self-Screening Cervical Cancer Test by Mail
0.43 NCI (2009) R03CA143965 Nonhomologous end-joinging polymorphisms and HPV integration in cervical dysplasi
0.42 NCI (2011) R01CA157469 Cytology vs at home HPV screening for detection of CIN 2,3,CIS
0.42 NCI (2008) R21CA125239 DNA methylation markers for cervical intraepithelial neoplasia III
0.42 NIAID (2010) None High-risk HPV infections in 18- 24-year-old women who date on-line
0.42 NCI (2011) ZIACP010210 HPV, cervical neoplasia, and vaccination
0.42 NCI (2010) None Pilot Program
0.42 NCI (2011) R21CA156537 HPV persistence: An overlooked consequence of helminth infection?
0.41 NCI (2008) Z01CP010124 Cervical cancer and human papillomavirus (HPV) infection

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(INCa_0876) Cardiovascular Diseases after radiotherapy for childhood cancer.
0.51 NCI (2008) Z01CP010131 Studies of Medical Radiation and Other Therapeutic Agents
0.47 NCI (2011) ZIACP010131 Studies of Populations Exposed to Therapeutic Medical Radiation and Other Agents
0.45 NCI (2008) R01CA131463 Prediction of Second Cancer Risks for Children Treated with Proton - vs. - Photon
0.44 NCI (2011) ZIACP010222 Studies of Populations Exposed to Diagnostic Medical Radiation

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(INCa_0888) Place an value of skills gained by patients ex patients and proxies involved in peer support or self help in the field of oncology

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(INCa_0892) "Understanding long-term Quality of Life in women with breast cancer: Emotional regulation, social sharing of emotion and psychological adjustment"
0.42 NIMH (2008) R44MH077363 Extending Evidence-Based Social Skills Training to Young Children
0.41 NIMH (2009) R01MH080725 Neural Mechanisms of Social Emotion Regulation
0.41 NIMH (2010) None Project 3- Social Cognition
0.40 NCI (2008) R03CA138122 Exploration of Social Information Processing in Pediatric Brain Tumor Survivors

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(INCa_0898) Genetic and outcome in aggresive lymphoma: analysis of DNA polymorphisms in a cohort of diffuse large B-cell lymphoma patients in the GELA LNH2003 study

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(INCa_0946) Evaluation of surgical procedures in oncology - Elaboration and validation of specific tool to assess external validity

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(INCa_0954) "The regulation of drug sensitivity in breast, prostate, colorectal and glioma cancer cells by the EGFR-Stat3 pathway."
0.49 NCI (2009) R21CA133652 Target Stat3 in pancreatic cancer using novel small molecule inhibitors
0.48 NCI (2008) R01CA106439 STATs as a Novel Approach to Cancer Therapy
0.46 NCI (2008) R01CA128865 Therapeutic Application of Novel Stat3 Inhibitors in Breast and Pancreatic Cancer
0.46 NIA (2008) Z01AG000892 Inflammation-mediated Insulin Resistance and Oncogenesis

0.46 NCI (2009) R01CA140681 Targeting STAT3 as a novel approach to cancer therapy
0.46 NCI (2009) R01CA140692 Targeting Stat3 to Improve Immunotherapy
0.46 NCI (2008) R01CA096652 The Development of Stat3 Inhibitors
0.43 NCI (2008) R01CA104035 A Novel Inhibitor of Stat3 for Prostate Cancer Therapy
0.43 NCI (2008) R01CA122910 Regulation of STAT3 Signaling
0.43 NCI (2008) R01CA087637 Role of Stat3 in Breast Cancer Tumorigenesis
0.42 NCI (2008) R01CA125192 Analysis of the STAT3 Pathway In Tumor Tolerance and Immune Evasion
0.42 NCRR (2009) K01RR025393 Dysregulation of STAT3 in Osteosarcoma
0.42 NCI (2009) R01CA105005 Cytokine modulated model growth inhibitory mechanisms
0.42 NCI (2008) R01CA125568 Roles of STAT proteins in tumor vaccine development
0.42 NCI (2010) R21CA141434 Evaluating the anti-tumor effects of novel curcumin analogs in melanoma
0.42 NEI (2010) None Regulation of JAK/STAT pathways in the eye
0.41 NCI (2008) R01CA115815 Role of Stat3 in modulating tumor microenvironment and angiogenesis

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(INCa_0972) Imaging-guided molecular targeted and improved gene therapies of experimental gliomas

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(INCa_0976) Candidate peptides of the molecular chaperones Bag-1L and NPM for molecular prostate cancer therapy
0.56 NCI (2008) R01CA127300 New Mice Models for Studies of Androgen Receptor in Prostate Cancer
0.54 None (2011) I01BX000526 Role of Rho GDP dissociation inhibitors in androgen signaling in prostate cancer
0.53 NCI (2008) R01CA113580 Stat5 in Progression of Prostate Cancer
0.53 NCI (2011) ZIABC010453 Identify SNPs and Polymorphisms Involved in the Development of Prostate Cancer
0.53 NCI (2008) R01CA111846 Prx1 in malignant progression of prostate cancer
0.53 NCI (2008) R01CA125661 Regulator of G-protein Signaling (RGS) Proteins in Prostate Cancer
0.53 NCI (2009) R01CA070297 Roles of the androgen receptor and its co-regulators in prostate tumorigenesis
0.53 NCCAM (2008) F31AT005042 Guggulipid for the chemoprevention of prostate cancer
0.52 NCI (2010) None Prostate tumor progression by mitochondrial DNA change
0.52 NCI (2011) R01CA143428 Rel B mediated-redox regulation of radiation therapy
0.52 NCI (2010) None CB2 Cannabinoid Receptor-mediated Regulation of Prostate Cancer Growth
0.51 NCI (2009) R01CA127901 Skp2 in androgen-dependent proliferation of prostate cancer cells
0.51 NCI (2008) P50CA058236 SPORE In Protate Cancer
0.51 NCI (2010) None CB2 Cannabinoid Receptor-mediated Regulation of Prostate Cancer Growth
0.51 NCI (2010) R01CA140217 Novel prostate cancer oncogenes identified by transposon mutagenesis
0.51 NCI (2009) R01CA102365 Invasion and Metastasis in Prostate Cancer
0.51 NCI (2010) None Identify SNPs and Polymorphisms Involved in the Development of Prostate Cancer
0.51 NCI (2008) R01CA059705 PATHOGENESIS AND PROGRESSION OF PROSTATE CANCER
0.51 NCMHD (2008) P20MD002285 RESEARCH CORE

(INCa_0977) Pre-clinical and clinical evaluation of biomarkers for anti-angiogenic therapy in pediatric solid tumors
0.42 NCI (2008) P01CA080124 Vascular Normalization: Rolse of Perivascular Cells
0.42 NCI (2010) R01CA049248 Combination Therapies for Cancer Treatment
0.40 NCI (2009) K99CA140708 Characterizing tumor endothelial cell abnormalities to develop rational anti-angi

(INCa_0979) NK cell mediated immunomodulation in graft versus host disease (GvHD)
0.49 NCI (2010) None Cellular and Molecular Studies of Bone Marrow Transplant
0.48 NIAID (2008) U19AI029530 Delayed Regulation of GVHD with Retained GVL Effect
0.48 NHLBI (2011) R01HL083072 Role of Tissue Antigen Presenting Cells in GVHD
0.48 NHLBI (2008) R01HL088954 LIGHT co-stimulatory therapy on GVHD and GVL
0.48 NCI (2008) P01CA039542 Cellular and Molecular Studies of Bone Marrow Transplant
0.47 NHLBI (2010) None Stable shRNA-mediated gene silencing of the beta 7 integrin to ameliorate graft-v
0.47 NCI (2010) None T cell repertoire of graft-versus-host disease and graft-versus-tumor effects
0.47 NHLBI (2008) R01HL084815 Cellular Pathology of Graft Versus Host Disease
0.47 NHLBI (2008) R01HL089905 Positive and Negative Regulation of Natural Killer Cells After BMT
0.47 NIAID (2011) R21AI092501 ROCK inhibitor suppression of GVHD with retention of GVL response
0.46 NHLBI (2008) R01HL056067 T Cell Targeting for GVHD
0.46 NHLBI (2008) K08HL088260 REGULATORY T CELLS, MIXED CHIMERISM: A NOVEL TRANSPLANT STRATEGY FOR THALASSEMIAS
0.46 NIAID (2010) None Elucidating the Function of PKC-theta in Alloreactivity and GVHD
0.46 NHLBI (2011) R01HL109599 Transfusion of Donor Effector Memory T Cells for GVL and Immune Reconstitution
0.45 NCI (2010) None Th1/Th17 Cell Differentiation in GVHD and GVL
0.45 NCRR (2008) R01HL055593 Etiology of Pathogenesis of Murine Graft Vs-Host Disease
0.45 NCI (2008) R01CA125276 NK Cells in GVHD and GVT
0.45 NIAID (2008) R01AI034495 In Vivo Prevention of Murine GVHD
0.45 NHLBI (2008) P01HL075462 LANGERHANS CELL REPLACEMENT FOLLOWING ALLOGENIC STEM CELL TRANSPLANTATION

(INCa_2138) Individual and familial determinants of consumption of psychoactive products in young people

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(INCa_2139) "Local festivities, alcohol and deviances in rural areas"

(INCa_2140) "Impact of an educational programme for addictive behavior for patients affected with chronic liver disease (Alcohol, HCV, HBV): randomized prospective study"
0.49 NIAAA (2009) P20AA017067 Pilot Feasibility Project #1
0.47 NIAAA (2011) R01AA020744 Micro RNA's in alcoholic liver disease
0.47 NCRR (2009) M01RR000065 THE NATURAL HISTORY OF NON-ALCOHOLIC FATTY LIVER DISEASE
0.47 NIAAA (2010) None Hepatocyte Clock and Alcoholic Fatty Liver Injury
0.47 NIAAA (2009) RC2AA019399 Characterizing Alcohol's Effects on Repair of Liver Injury
0.46 NIAAA (2008) R01AA018016 The Role of Alcohol in HIV Therapy Hepatotoxicity
0.46 NCRR (2010) None THE NATURAL HISTORY OF NONALCOHOLIC FATTY LIVER DISEASE
0.43 NIAAA (2009) R01AA018846 Role of aberrant regulation of organelle stress responses in alcohol-induced live
0.43 NIDDK (2010) None BMP Signaling--A Therapeutic Target in Liver Disease
0.43 NIAAA (2008) R21AA016919 Chronic Alcohol Effects on Transcriptional Regulation in Liver Regeneration
0.43 NIAAA (2010) R01AA017626 Alcohol-induced changes in hepatic microtubules: mechanisms and consequences
0.43 NIAAA (2011) R21AA020494 MFG-E8 and progression of alcohol-induced tissue injury
0.41 NIAAA (2010) None Regulation of MCP-1 and chemokine receptor 2 (CCR2) in alcoholic liver disease

0.41 NIAAA (2010) None Alcoholic Liver Diseases: Damage, Repair and Stem Cell Regeneration
0.41 NIDDK (2010) None Noninvasive Assessment of Liver Stiffness with Tagged MRI
0.41 NIAAA (2011) R21AA020078 Genetic Alterations Promoting Alcohol Induced Hepatic Carcinogenesis
0.40 NIDDK (2009) R01DK081417 The Role of Hippo Pathway in Liver Regeneration

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(INCa_2141) Assessing the efficiency and costs of different methods of systematic reminder after any missed appointment (mail and SMS) for patients followed in a outpatient unit for addictive diseases : randomized study by method of reminder.

(INCa_2163) The dependence receptor signaling pathway and tumor progression.

(INCa_2315) Construction of Cell-Cell Interaction Networks

(INCa_2316) Protein and lipidic intermediates of SNARE-mediated membrane fusion
0.65 NIDDK (2008) R37DK027044 Mechanisms of Intracellular Membrane Fusion
0.63 NIGMS (2008) R01GM071832 Functional Reconstitution of Yeast Exocytosis
0.63 NIGMS (2008) P01GM072694 Structural Dynamics of Presynaptic Membrane Fusion
0.62 NIGMS (2010) None Structural Dynamics of Presynaptic Membrane Fusion
0.61 NIGMS (2008) R01GM067629 Yeast SNARE Assembly and Membrane Fusion
0.61 NIGMS (2011) P01GM072694 Structural Dynamics of Presynaptic Membrane Fusion
0.60 NIGMS (2010) R01GM086808 AFM studies of SNARE-mediated membrane fusion
0.59 NIGMS (2010) None Single-molecule manipulation of SNAREs
0.59 NIGMS (2008) P01GM072694 MOLECULAR INTERACTIONS OF SYNAPTOTAGMIN MEDIATING MEMBRANE FUSION
0.58 NIGMS (2011) P01GM072694 Project 2 - Presynaptice Fusion Complex Assembly on Membranes Probed by Micro-Flu
0.57 NIGMS (2009) R01GM086808 AFM studies of SNARE-mediated membrane fusion
0.57 NIMH (2008) R01MH063105 Single Molecule Studies of SNARE-Induced Vesicle Fusion
0.56 NINDS (2008) R01NS054760 SNARE Protein Dynamics during Synaptic Transmission
0.56 NIGMS (2011) P01GM072694 Project 3: Molecular Interactions of Synaptotagim Mediating Membrane Fusion
0.56 NIGMS (2011) R01GM073831 Membrane Remodeling and Protein Trafficking in Bacteria
0.56 NIGMS (2010) None Structure and Function of the Exocyst Complex
0.55 NINDS (2009) K99NS064213 Structural dynamics of the proteins involved in calcium-triggered exocytosis
0.55 NIGMS (2008) R01GM071458 REGULATION OF EXOCYTOSIS STUDIES WITH FLIPPED SNARES
0.54 NIDDK (2008) K99DK080080 Regulation of GLUT4 Exocytosis

(INCa_2351) A comprehensive study on the multiple engagements of TFIIH in a living animal model

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(INCa_2352) The impact of nuclear architecture in the formation of chromosome translocations
0.51 NIGMS (2011) F32GM096692 The Role of Chromatin Architecture in Programmed Double-Strand Breaks
0.49 NIGMS (2008) F32GM079015 C.elegans CHK-2 in meiotic chromosome organization
0.47 NCI (2011) R01CA151367 Non-Homologous End Joining Repair in Humans
0.46 NIAID (2008) R21AI076747 Exploring the Mechanisms of 53BP1-driven Immune Deficiency and DNA Repair

0.46 NIGMS (2008) R01GM084242 Amplification of Risk Caused by Mis-Routing of DNA Double-Strand Break Repair
0.45 NIGMS (2010) None Break-induced replication and genome rearrangements
0.43 NCI (2011) F31CA163530 Mechanisms underlying the generation of oncogenic chromosomal translocations
0.43 NIGMS (2010) None Control of meiotic double strand break formation
0.43 NCI (2010) R01CA139429 EPIGENETIC CONTROL OF NHEJ DNA REPAIR
0.42 NIGMS (2011) F32GM096701 Role of Chromatin and ATP-dependent Remodeling on DNA DSB Processing
0.42 NCI (2008) R01CA125195 Molecular Pathways in Suppression and Development of T Lineage Lymphomas
0.41 NCI (2011) R01CA120205 Chromosome instability resulting from double-strand breaks near telomeres
0.41 NIEHS (2009) ZIAES065073 Mechanisms Of Genome Instability
0.41 NIGMS (2011) F31GM097861 Functional Characterization of Rec104 in Meiotic Recombination
0.41 NCI (2008) R01CA095641 Chromatin's Role in Repair of Radiation-induced Damage.
0.41 NIGMS (2009) R01GM061766 Arrest, Recovery, and Adaptation from DNA Damage
0.40 NCI (2010) None Repair of DNA double-strand breaks with damaged ends
0.40 NIEHS (2011) R21ES019779 LOCALIZED REVISION OF EPIGENETIC LANDSCAPES INDUCED BY DNA DOUBLE-STRAND BREAKS

(INCa_2354) CD98heavy chain: A key component of the regulation of integrins in wound healing and skin tumorigenesis
0.66 NHLBI (2008) P01HL031950 Regulation of Fibronectin Matrix Assembly
0.59 NICHD (2011) ZIAHD008858 Regulation of stem cell development during tissue remodeling
0.53 NIAMS (2011) R01AR054184 Keratinocyte Migration and Wound Healing
0.50 NIAMS (2008) R01AR054184 Keratinocyte Migration and Wound Healing
0.47 NIGMS (2009) R01GM068600 Integrin-Filamin Interactions in Migration and Signaling
0.46 NIDDK (2008) R01DK057604 Integrins in epithelial morphogenesis
0.45 NIAID (2008) R01AI031126 Very Late Antigen Integrin Activity on T Cells
0.44 NIGMS (2011) R01GM062823 Molecular Elucidation of Integrin Signaling
0.44 NIDDK (2011) R01DK094702 Beta 1 integrins in erythropoiesis
0.44 NCI (2008) R01CA098027 The a2b1 Integrin: Innate Immunity to Pathogens &Tumors
0.44 NIGMS (2008) R01GM042474 Structure/Function Studies of the Integrin
0.43 NIDCR (2008) R01DE018512 Role of Rap1 in cadherin and integrin mediated cross-talk in oral keratinocytes
0.43 NHLBI (2009) P01HL073311 Structure and Function of Beta3 Integrins on Blood Cells
0.43 NIDDK (2008) F30DK082139 The role of beta1 integrin in modulating gut-homing alpha4beta7 on T cells
0.42 NHLBI (2009) P01HL057900 Suppressors of Intergrin Activation
0.42 NCI (2008) P01CA093615 Regulation of Integrin Signaling by Adapter Proteins
0.42 NHLBI (2009) P01HL073311 Structure Basis for Talin-mediated Integrin Activation
0.42 NCRR (2009) P41RR006009 IN SILICO STUDY OF GLYCOSYLATION EFFECTS ON INTEGRIN STRUCTURE AND FUNCTION
0.42 NHLBI (2010) None Structure and Function of Beta3 Integrins on Blood Cells

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(INCa_2355) "MEMO, microtubule outgrowth and cancer cell motility"
0.45 NIGMS (2011) R15GM093288 EB1 protein: regulator of actin protrusion and cell motility
0.42 NCI (2010) R21CA135601 Quantitative Analysis of Cancer Cell Motility using Microfluidic Devices
0.40 NIGMS (2010) None Quantitative Analysis of Chemotactic Motility Cycle of Ameboid Cells
0.40 NIGMS (2011) R01GM068952 Mechanics of lamellipodial stability, turning and self-polarization

(INCa_2800) Keeping retrotransposons under control in the human genome
0.46 NIGMS (2008) R01GM066695 Human variation in retrotransposon activity
0.43 NCI (2008) P01CA016519 Endogenous Retroelements
0.42 OD (2010) None Retrotransposon as a major source to epigenetic variations in the human genome

(DGOS_1076) The IDEA (International Duration Evaluation of Adjuvant Chemotherapy) Colon Cancer Prospective

(DGOS_1078) Genetic study of small bowel adenocarcinoma

(DGOS_1079) Evaluation of the diagnostic performance of MRI+biopsy to optimize resection of Ductal Carcinoma In Situ in the breast cancer
0.49 NCI (2011) R01CA149365 Effectiveness of Pre-Operative MRI in Breast Cancer Surgery and Outcomes
0.46 NCI (2011) R01CA148994 Combined Acoustic Imaging and Viscoelastic Parameters Estimation in Breast Cancer
0.44 NCI (2010) None MR Diffusion Tensor Imaging for Detection and Characterization of Breast Lesions
0.43 NIBIB (2008) R01EB008713 Robotic Haptic Feedback System for Bx/RFA of Breast Tumor under Continuous MRI
0.43 NCI (2008) R21CA118569 Development of Direct Metabolite Imaging for Human Breast Cancer
0.42 NCI (2008) P50CA125183 Specificity of MRI with optimal temporal, spatial, and spectral samp. for early B
0.42 NCRR (2011) P41RR008079 BRAIN STRUCTURE WITH 7 TESLA MRI IN EPILEPSY
0.41 NCRR (2009) P41RR008079 BRAIN STRUCTURE WITH 7 TESLA MRI IN EPILEPSY
0.41 NCI (2008) K07CA128816 Clinical and Economic Evaluation of Breast MRI for High-Risk Screening
0.41 NCI (2009) R01CA100184 Multiparametric MRI characterization of breast tissue
0.40 NCI (2008) K23CA097181 Primary Hormonal Therapy for DCIS of the Breast

(DGOS_1093) Impact of urinary genetic factors and biomarkers in the strategy of early diagnosis of aggressive prostate cancers.
0.56 None (2011) I01BX001258 Prostate Cancer: Targeting Androgen Receptor Signaling by Tetrandrine
0.56 NCI (2011) R01CA161880 Tetrandrine for the treatment of Prostate Cancer
0.53 NCI (2008) U01CA089600 Prostate Cancer Susceptibility: The ICPCG Study
0.52 NCI (2008) R03CA121871 Inflammatory Pathway Gene Polymorphisms and Risk of Prostate Cancer
0.52 NCI (2008) K99CA129565 The Role of beta-adrenergic Signaling in Prostate Cancer
0.52 NCI (2010) R03CA150079 Clinical Utility of Genetic Markers Associated with Early Onset Prostate Cancer
0.51 NCI (2010) None Improving prostate biopsy efficiency: The finasteride challenge test
0.51 NCI (2010) R01CA142824 Radiation Force Imaging of Prostate Cancer and Guidance of Biopsy Procedures
0.51 NCI (2011) R01CA149273 Small Integrin-binding Glycophosphoproteins as Biomarkers for Prostate Cancer
0.50 OD (2009) RC2CA148463 Clinical validity and utility of genomic targeted chemoprevention of PCa
0.50 NCI (2008) R01CA106826 Developmental Transcription Factors in Prostate Cancer
0.49 NIA (2010) None Health And Disease Status In the BLSA--the Prostate Gland
0.48 NIA (2009) ZIAAG000633 Health And Disease Status In The Blsa--the Prostate Gland
0.47 NIA (2008) Z01AG000633 Health And Disease Status In The Blsa--the Prostate Gland

0.47 NCI (2008) R01CA129003 Comprehensive MRI, MRS and Molecular Analyses: Pten-based Prostate Cancer Models
0.47 NIA (2011) ZIAAG000633 Health And Disease Status In the BLSA--the Prostate Gland
0.47 NCI (2011) R01CA157845 Regulation of Polycomb Repressive Complex 1 by EZH2 Regulated microRNAs in Cancer
0.47 NCI (2011) ZIACP010180 Prostate Cancer Studies
0.47 NCI (2009) P50CA090386 Modulation of Prostate Cancer Cell Motility by Chemopreventive Agent Genistein

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(DGOS_1097) Randomized therapeutic trial with a pentoxifylline- tocopherol-clodronate combination versus placebo in radiation-induced plexitis: a PENTOCLO study

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(DGOS_1098) Chemotherapy with temozolomide-bevacizumab association in supratentorial glioblastoma of elderly patients (older than 70y) with poor performance status (KPS inferior to 70)

(DGOS_1100) A dose escalation phase I/II trial of the antiviral agent Cidofovir in combination with Cetuximab in metastatic HPV positive squamous cell carcinomas.
0.44 NCI (2008) P01CA042792 HPV: Biology, Clinical Significance and Epidemiology
0.44 NCRR (2009) P20RR017696 AN ENDOGENOUS SUPERANTIGEN IN HPV ASSOCIATED OROPHARYNGEAL CARCINOMA
0.44 NIAID (2008) R21AI078489 New Cellular Effectors of Human Papillomavirus E7 Activity
0.44 NCI (2008) P01CA050661 Cellular Targets of Papillomavirus Oncoproteins
0.44 NCRR (2011) P41RR001646 PATHOGENIC PROTEIN INTERACTIONS
0.43 NIDCD (2010) None The Role of Rac1 in HPV-induced Recurrent Respiratory Papillomatosis
0.43 NCI (2009) P01CA022443 Molecular Genetics of Human Papillomavirus Infection and Oncogenesis
0.43 NHLBI (2011) R01HL108102 Fanconi Anemia as a Model for Susceptibility to Human Papillomavirus Infection
0.42 NCI (2008) P01CA042792 EPIDEMIOLOGY OF HPV-RELATED SCSC IN TRANSPLANT PATIENTS
0.42 NCI (2009) U01CA141583 Novel Interventions Against HPV-associated Neoplasia
0.42 NIAID (2008) R41AI068159 Antiviral Compounds that Target HPV18 DNA
0.42 NCI (2009) P01CA050661 Papillomavirus E2 Growth Suppression Mechanisms
0.42 NICHD (2009) R03HD058771 Disclosure of High-Risk HPV Infection to Sex Partners of Young Men
0.42 NIGMS (2010) SC2AI090922 Anogenital HPV Infection in a Population-Based Sample of Puerto Rican Women
0.42 NCI (2011) R21CA153096 Initial process of HPV binding and entry.
0.42 NCI (2010) R01CA098803 Natural History of HPV Infection in Men: The HIM Study
0.41 NIAID (2009) U19AI084081 University of New Mexico Interdisciplinary HPV Prevention Center
0.41 NCI (2009) RC1CA145188 Oncogenic Human Papillomavirus Protein Network
0.41 NCI (2008) R01CA102489 HPV Clearance by Folic Acid Supplementation

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(DGOS_1103) Treatment of children younger than 5 years of age wihth high risk medulloblastoma

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(DGOS_1104) Multicentric phase III trial comparing simple follow-up to exploratory laparotomy plus -in principle- HIPEC (hyperthermic intraperitoneal chemotherapy) in colorectal patients initially treated with surgery and adjuvant chemotherapy who have a high risk of developing colorectal peritoneal carcinomatosis . (Acronyme : Prophylo-HIPEC).

(DGOS_1107) Randomized Phase II trial seeking the most promising drug association with azacytidine- in higher risk myelodysplastic syndromes

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(DGOS_1108) Treatment of renal failure due to myeloma cast nephropathy: comparison of two different chemotherapy regimens and evaluation of optimized removal of monoclonal immunoglobulin light chains using a high permeability hemodialysis membrane.
0.44 NHLBI (2008) K23HL083981 Embolic Protection During Renal Artery Stenting

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(DGOS_1110) "Prognosis value of the abnormalities of a new tumor suppressor gene, TET2 in myelodysplastic syndromes and secondary acute myeloid leukemias."

(DGOS_1111) Radiation dose intensity study in breast cancer in young women: a randomized phase III trial of additional dose to the tumor bed
0.43 NCI (2010) R01CA136783 Prediction Model: Breast Cancer in Women Irradiated for a Pediatric Malignancy
0.42 NCI (2010) None RISK FACTORS FOR TRIPLE-NEGATIVE AND HER2-OVEREXPRESSING BREAST CANCER AMONG HI..
0.41 NCI (2010) None Studies of Medical Radiation and Other Therapeutic Agents
0.41 NCI (2008) R03CA132575 Cardiovascular Risk Factors and Lifestyle Modification in Breast Cancer Survivors
0.41 NCI (2011) P01CA151135 Reproduction, Lactation and Hormonal Factors in Breast Cancer Subtypes
0.41 NCI (2008) R01CA120562 Commonly Used Medications and Breast Cancer Recurrence
0.41 NCI (2008) R01CA131333 WISER Sister
0.40 NIMH (2010) R01MH084886 Optimal Dosing of Antipsychotic Drugs in Late Life
0.40 NCI (2008) R01CA106979 Impact of Breast Cancer on Older Survivors
0.40 NCI (2009) R01CA095545 Mammographic Density and Soy Isoflavones
0.40 NCI (2011) F32CA163024 Subregional measurements of breast features to assess breast cancer risk

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(DGOS_1117) Phase II randomize study evaluating the value of two ways of reirradiation after surgery for previously irradiated carcinoma of the upper aerodigestive tract

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(DGOS_1122) "Phase II multicentric uncontrolled national trial assessing the efficacy of Nilotinib in treatment of primary melanomas , stage III unresectable melanomas, or Stage IV melanomas with c-KIT mutation or amplification."

(DGOS_1126) Evaluation of dynamic contrast-enhanced whole-body magnetic resonance imaging as an independent prognostic factor for event-free survival in patients with multiple myeloma treated with high-dose therapy followed by autologous stem cell transplantation

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(DGOS_1129) Intergroup Trial For Children or Adolescents With B-Cell NHL or B-AL: Evaluation of Rituximab Efficacy and Safety In High Risk Patients (Inter-B-NHL Ritux 2010).

(DGOS_1131) "CirCe01 study: Evaluation of the use of Circulating tumour Cells to guide chemotherapy from the 3rd line of chemotherapy for metastatic breast cancer "
0.46 NCI (2011) R33CA157396 Advanced Development of An Integrated CTC Enrichment Technology
0.45 NCI (2009) R01CA141077 Circulating Tumor Cell Capture &Analysis in a Multi-Center Prostate Cancer Trial

0.45 NIBIB (2009) R01EB009230 Multifunctional nanotubes for in vivo detecting/purging circulating cancer cells
0.45 NCI (2010) None 3D-Nanostrcutured Substrates for Detection of Circulating Tumor Cells
0.45 NCI (2010) None High Sensitivity Detection and Isolation of Circulating Tumor Cells
0.45 NCI (2009) R21CA139373 In vivo molecular laser detection and treatment of circulating cancer stem cells
0.44 NCI (2010) None Automated Systems for Detection and Molecular Characterization of Circulating Tum
0.44 NCI (2010) None Characterization of biomarkers on circulating tumor cells to guide therapy
0.43 NCI (2011) 261201100114C-0-0-1 TAS::75 0849::TAS "TOPIC 293, POINT OF CARE DEVICE FOR ANTIBODY INDEPENDENT ISOL
0.42 NCI (2010) None Targeted Therapy to Receptors for LH-RH in Prostate Cancer
0.42 NCI (2008) R01DA015183 The Community Youth Development Study: A Test of Communities That Care
0.41 NCI (2009) R44CA140047 Cancer Progeniyor Cell Markers
0.41 NIBIB (2010) None Point-of care Microfluidics for Early Detection of Cancer
0.41 NCI (2008) R01CA111359 High-speed reliable detection of cancer cells in blood
0.41 NIDA (2011) R01DA015183 The Community Youth Development Study: A Test of Communities That Care
0.41 NCI (2010) None Immunonanoparticle Optical Sensor for CTC Detection
0.40 NCI (2009) R43CA137893 Intravital Fiber-Optic Flow Cytometer
0.40 NCI (2008) R44CA122444 Multiplex Gene Expression in Single Cells for Circulating Tumor Cell Detection

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(DGOS_1133) MINICORD STUDY : Assessment of decrease of transplant related toxicity after unrelated cord blood transplantation with reduced intensity conditioning in patients with myeloid acute leukemia.

(DGOS_1141) Changes in phenotype and genotype of breast cancers during the metastatic process and optimization of therapeutic targeting
0.40 NCI (2008) R01CA097022 Survival Mechanisms of Invasive Carcinoma Cells

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(DGOS_1142) Validation of a non invasive DNAmethylation test for diagnosis of early stage colorectal tumors

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(DGOS_1145) Integrated analysis of angiogenesis and p53 combined to genome-wide analyses in refractory diffuse large B-cell lymphoma: Identification of molecular pathways for targeted therapies

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(DGOS_1146) Study BIO IFCT-08_01 - BIO TASTE TAilored post-Surgical Therapy in Early stage NSCLC. Determination of biomarkers in a randomized phase II/III trial evaluating postoperative therapeutic strategy in stage II/III A non-N2 non-squamous NSCLC.

(DGOS_1155) "Phase III multicenter study to assess the efficacy of an Imatinib Mesylate (IM) dose adjustment strategy on molecular response in patients presenting with chronic myeloid leukemia (chronic phase CML-CP) treated with IM 400 mg/day for at least two years, in complete cytogenetic response for at least 1 year. "

(DGOS_1165) Autologous or allogeneic transplantation following conventional chemotherapy in younger patients (18-60 yrs.) with mature (peripheral) T-cell lymphoma

(DGOS_1169) Safety evaluation of a combination of brain radiation therapy and Bevacizumab (Avastin TM) for treatment of brain metastasis
0.41 NCI (2011) K99CA158066 Dissecting the Role of Src Family Kinases in Breast Cancer Brain Metastasis

(DGOS_1170) Effects and toxicity of Sorafenib (Nexavar TM) in metastatic uveal melanomas: a multicenter phase II trial
0.41 NCI (2010) None Combination Therapy that Targets Glutamate Signaling in Melanoma
0.40 NCI (2010) R01CA142873 The GNAQ pathway as a therapeutic target in uveal melanoma

(DGOS_1172) Radiochemotherapy with and without dose escalation in patients presenting locally advanced or inoperable carcinoma of the oesophagus: A phase II/III trial

(DGOS_1174) Randomised phase III trial sorafenib - pravastatin versus sorafenib alone for the palliative treatment of child-pugh a hepatocellular carcinoma trial ANGH-FFCD 0803

(DGOS_1186) Comparison between multifield radiotherapy and intravenous rituximab in indolent cutaneous B-cell lymphomas with multiple or recurrent lesions

(DGOS_1190) A phase II study of lenalidomide (revlimid TM) in association with R-CHOP (R2-CHOP) in treatment of follicular B-cell lymphoma

(DGOS_1191) Prognostic value of circulating tumoral free DNA versus circulating tumoral cells in patients with colorectal cancer stage II-III

(DGOS_1203) Optimisation of 3D dose distribution in intracavitary pulsed-dose-rate brachytherapy for locally advanced cervix carcinomas

(DGOS_1204) "Randomized phase III study comparing conventional-dose treatment using a combination of Bortezomib, Lenalidomide and Dexamethasone (VRD regimen) to high-dose treatment with peripheral stem cell transplant in the initial management of myeloma in patients under 65 years of age."

(DGOS_1208) "Adjuvant hormonotherapy of breast cancer : Pharmacokinetics of tamoxifen and aromatase inhibitors, correlation with pharmacogenetic characteristics"
0.50 NCI (2011) R01CA155307 CYP2D6 gene variants and effectiveness of adjuvant tamoxifen in breast cancer
0.48 NIGMS (2011) R01GM099143 Genetic Predictors of Anti-Estrogen Clinical Activity in Breast Cancer Patients
0.47 NCI (2008) R44CA110874 Breath Test for CYP2D6 Activity in Candidates for Tamoxifen Therapy
0.46 NIEHS (2009) U01GM061373 Pharmacogenetics Research Network and Knowledge Base
0.45 NCI (2008) R01CA118708 Modification of tamoxifen effectiveness by gene polymorphisms and other drugs
0.44 NCI (2009) R21CA135237 Chemoprevention of Tamoxifen-induced Endometrial cancer by black cohosh and red c
0.44 NCI (2009) R01CA140690 Dissecting the Mechanisms of Tamoxifen Action
0.43 NCI (2010) None ABC: Antidepressants and Breast Cancer Pharmacoepidemiology
0.43 NCRR (2009) P41RR013461 AMS: BINDING OF ANTIOESTROGEN, TAMOXIFEN TO DNA AS CHEMOPREVENTIVE AGENT IN WOME

0.43 NCI (2008) R01CA120516 Wwox as a Critical Signal Mediator in Breast Cancer
0.41 NCI (2009) R21CA137635 Role of Estrogen Receptor alpha-p53 Interaction in Resistance to Tamoxifen Therap
0.40 NCI (2009) R21CA129046 Role of HIC1 in suppression of breast cancer growth and tamoxifen resistance

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(DGOS_1217) Intermediate risk prostate cancer: Prospective phase II study evaluating hypofractionated stereotactic boost irradiation
0.43 NCI (2010) None Clinical Evaluation of Real-Time MV/kV Image Guided Prostate Radiation Therapy
0.43 NCI (2008) P50CA097186 The Effect of Radiation on Androgen Receptor Expression and Activity in Prostate
0.41 NCI (2009) K01CA125204 Improving Effectiveness and Accuracy of Radiation Therapy
0.41 NCI (2008) K01CA125204 Improving Effectiveness and Accuracy of Radiation Therapy
0.40 NCI (2011) R01CA143428 Rel B mediated-redox regulation of radiation therapy
0.40 NCRR (2009) S10RR027610 Image-Guided Radiation Therapy and Radiosurgery for Small Animals

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(DGOS_1218) Cilengitide (EMD121974) in combination with irradiation in children and young adults with newly diagnosed diffuse intrinsic pontine glioma : Phase I study.

(DGOS_1225) Impact of chemotherapy on ovarian reserve in young women with breast cancer
0.51 NICHD (2010) None Ovarian Reserve After Cancer: Longitudinal Effects (The ORACLE Study)
0.49 None (2008) R18DP001142 Prevention of Ovarian Cancer in Women Participating in Mammography
0.49 NIA (2009) R21AG032555 Quantitative Assessment of the Effects of Aging on the Female Reproductive Axis
0.48 NCI (2011) R03CA159080 Mammographic Breast Density and Ovarian Cancer
0.47 NCI (2010) None Identifying Ovarian Cancer Susceptibility Alleles using Genome-Wide Scan Data
0.47 NCI (2011) R01CA157176 Racial Disparities, Survival &Secondary Debulking for Ovarian Cancer
0.46 NCI (2008) P50CA083636 Molecular Targets for Prognosis and Therapy
0.46 NCI (2008) R03CA136019 Prolactin as a risk biomarker of ovarian cancer
0.45 NCI (2008) P30CA014236 BREAST AND OVARIAN ONCOLOGY
0.45 NICHD (2010) None RCT of GnRH-a for ovarian protection during CYC therapy for rheumatic disease
0.45 NCI (2010) None Epidemiology of Ovarian Cancer in African-American Women
0.45 NCRR (2010) None NOVEL STRATEGIES FOR OVARIAN CANCER PREVENTION
0.45 NCCAM (2008) R21AT004085 Therapeutic Efficacy of Flax Seed in the Prevention of Ovarian Cancer
0.44 NCI (2011) R03CA162511 Fish oil for the prevention and treatment of ovarian cancer
0.44 NINR (2008) R21NR010571 The Feasibility of Earlier Detection of Ovarian Cancer Using Symptom Reports
0.44 NCI (2008) R21CA116585 Inflammatory Markers in Circulation and Ovarian Cancer Risk
0.44 NCCAM (2011) R01AT005295 Therapeutic Efficacy of Flaxseed in the Treatment of Ovarian Cancer
0.44 NCI (2009) R01CA136891 A Pooled Analysis to Identify New Ovarian Cancer Risk Factors
0.44 NCI (2009) K07CA134747 Predictors of Ovarian Function in Women Treated With Aromatase Inhibitors

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(DGOS_1229) Clofarabine/ARA-C treatment combined with reduced intensity conditioning allogeneic stem cell transplantation for acute myeloid leukemia in primary treatment failure

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(DGOS_1231) Evaluation of sentinel lymph node detection after neoadjuvant chemotherapy for large operable breast cancer. Protocole GANEA 2.

(DGOS_1235) "Phase II study of first line treatment of chronic graft versus host disease with the association of ciclosporine, corticosteroids and rituximab."

0.50 NCI (2008) U01CA118953 Improving Outcomes Assessment in Chronic GVHD
0.44 NHLBI (2011) R34HL105776 Phase II Study of a Novel GVHD Prevention Strategy: Etanercept and Photopheresis
0.44 NCI (2009) P01CA142106 Human Minor Histocompatibity Antigens
0.44 NIAMS (2009) R03AR055791 Innate immunity in fibrotic and cytotoxic GVHD
0.43 NIAID (2009) R42AI069602 Inhibition of IkK to treat lethal Graft-vs.-Host Disease
0.43 NIAID (2008) R42AI069602 Inhibition of IkK to treat lethal Graft-vs.-Host Disease
0.43 NHLBI (2009) RC1HL101102 Graft versus Host Disease Biomarkers: Prediction of Onset and Response to Therapy
0.43 NIAID (2008) R01AI066008 Role of Autoreactivity in Pathogenesis of Chronic GVHD
0.43 NCI (2011) P01CA142106 Human Minor Histocompatibity Antigens
0.42 None (2010) None IND 20212 (03-25-99) PHASE 3: ORBEC (ORAL BDP) -PATIENTS WITH GI GVHD-FDA-11-12-0
0.42 NCI (2010) None GVHD Clinical Trials and Biomarkers
0.41 NIAID (2009) U54AI083028 Longitudinal Study of Immune Mediated Disorders After Allogeneic HCT
0.41 NIAID (2010) R01AI066008 Role of Autoreactivity in Pathogenesis of Chronic GVHD

(DGOS_1242) Molecular portrait of an aggressive form of breast cancer : cancer of young women under 35

0.56 NCI (2011) P01CA151135 Reproduction, Lactation and Hormonal Factors in Breast Cancer Subtypes
0.56 NCI (2010) None Genome-wide association study of breast cancer in the African Diaspora
0.54 NCI (2010) None Understanding and preventing breast cancer disparties in Latinas
0.53 NCI (2008) R01CA109058 Peripheral Blood Molecular Staging of Breast Cancer
0.53 NCI (2010) None RELATIONSHIP OF BREAST CANCER SUBTYPE, RISK FACTORS AND ANCESTRY IN HISPANIC A...
0.52 NCI (2009) R43CA141750 Improved Blood-Based Test for Breast Cancer
0.52 NCI (2010) None Development of recombinant rhTL1A protein for cancer treatment
0.52 NCI (2008) R01CA125577 Role of CCN6 (WISP3) in the progression and metastasis of breast cancer
0.52 NCRR (2009) M01RR000043 BLOOD TUMOR MARKERS FOR MOLECULAR DIAGNOSIS OF BREAST DISEASE AND MONITORING
0.51 NCI (2010) R01CA135101 Determinants of breast tissue composition in young women
0.51 NCI (2009) U54CA143931 Charles Drew University/UCLA Cancer Center Partnership to Eliminate Cancer Health
0.51 NCI (2010) None Oncopigs as a better model for human cancer
0.51 NIGMS (2008) SC3GM084824 Molecular targets of soy isoflavones in breast cancer progression
0.50 NCI (2009) R21CA133597 Abi pathway in Breast Cancer Metastasis
0.50 NCI (2008) R01CA106979 Impact of Breast Cancer on Older Survivors
0.50 NCI (2008) P50CA058223 Career Development Program
0.50 NCI (2009) R01CA094150 The role of BMI1 in breast cancer
0.50 NCMHD (2008) P20MD002314 LOSS OF ALCAM FUNCTION: TUMORIGENESIS &DISPARITY IN BREAST CANCER
0.50 NCI (2008) P50CA089019 SPORE in Breast Cancer

(DGOS_1244) "Randomized study comparing the interest of a program of evaluation and geriatric intervention on the functional status, quality of the life, and survival of elderly patients with acute myeloid leukaemia."
0.42 NHLBI (2010) None A Nurse-Led Physician-Directed System for Providing Optimal Cardiac Care

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(DGOS_1245) "Phase 0 ""proof of concept"" trial evaluating anti cancer stem cell activity of pre-operative bevacizumab in combination with chemotherapy in breast cancer - AVASTEM"

(DGOS_1247) A randomized phase II study comparing paclitaxel-trastuzumab-everolimus vs paclitaxel-trastuzumab- placebo in molecularly selected patients with HER2+ metastatic breast cancer and activation of PI3K/AKT pathway. Protocol RESTOR

(DGOS_1249) "A prospective, multicenter randomized study comparing single versus double umbilical cord blood transplantation in children and young adults (< 35 years) with acute leukemia in remission "
0.44 NHLBI (2011) T32HL007952 Training Program in Hematopoietic Cell Transplantation
0.42 NCI (2009) K23CA129679 Novel Immunotherapeutic Approaches and Tools Utilizing Allogeneic T Cells
0.41 NINDS (2009) R01NS058710 Combination therapy in human ES cell transplantation after neonatal stroke

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(DGOS_1262) Chimiodiet study: impact of early and active nutritional and dietary management on grade 3 or more toxicities induced by chemotherapy and targeted therapies administered to patients as first intention for non surgical metastatic colorectal cancer

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(DGOS_1285) "An open-label, randomized, multicentric, phase III study to evaluate the efficacy of afatinib (BIBW 2992) in maintenance therapy after postoperative concurrent radiotherapy and chemotherapy for squamous-cell carcinoma of the head and neck."

(DGOS_1287) Study of colorectal polyposis risks in monoallelic MYH gene mutation carriers.
0.41 NCI (2008) U24CA074794 The Colon Cancer Family Registry: Seattle
0.41 NCI (2008) P01CA041108 Advanced Adenomas and Serrated Adenomas as precursors
0.40 NCI (2008) P50CA095103 Tennessee Colorectal Polyp Study

(DGOS_1289) Multicenter phase I/II study of continuous dosing of Sunitinib in non-GIST sarcomas with concomitant radiation therapy
0.40 NCRR (2011) M01RR000188 CLINICAL TRIAL: H-25421: ADVL0815: A PHASE I STUDY OF PAZOPANIB AS A SINGLE AGE

(DGOS_1291) Prospective multicentric evaluation of a bladder preservation strategy using a combination of neoadjuvant chemotherapy with intensified MVAC (Methotrexate + vinblastine + adriamicine + Cisplatine) and optimal bladder transurethral resection in patients with a localized muscle infiltrative urothelial carcinoma (protocol ReChiVe)
0.43 NIDDK (2008) R21DK081832 Novel Studies of Bladder Regeneration in a Rodent Model
0.43 NIDDK (2008) R01DK078158 Neural Crest Contributions to the Bladder
0.42 NIDDK (2008) K08DK069608 Molecular Basis of Bladder Organogenesis
0.42 NIDDK (2009) K99DK085144 The Role of Urothelial-Interstitial Cell Communication in Detrusor Overactivity
0.42 NIDDK (2011) F32DK089733 Characterizing the Molecular Pathways of Bladder Smooth Muscle Development

0.42 NCI (2011) ZIABC011351 Bladder Cancer Program
0.41 NCI (2008) R41CA132499 Genetic Programming to Predict Clinical Outcome from Transcript Quantification
0.41 NIDDK (2008) R01DK073218 Early-In-Life Inflammation Effects on Urinary Bladder Sensation
0.40 NIDDK (2008) R01DK078655 Neonatal Bladder Inflammation, Opioids, and Adult Bladder Pain
0.40 NCI (2011) R43CA162448 Intra-bladder MMC &suramin for nonmuscle-invading &locally advanced bladder ca
0.40 NIDDK (2011) R01DK091253 Bladder Nociception: function/central projection of Sympathetic Afferent Pathway
0.40 NIDDK (2011) R43DK093413 Novel Glycosaminoglycan Derivatives for Treatment of Bladder Inflammation
0.40 NCI (2011) R03CA159348 Tanshinones for prevention of bladder cancer progression

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(DGOS_1296) Medico-economic evaluation of robotic-assisted laparoscopic radical prostatectomy (the Da Vinci® system)
0.45 None (2008) F32HS017876 Cost-effectiveness of Interventions to Reduce Mortality of Myocardial Infarctions
0.43 NIDDK (2008) R01DK078172 Economic Analysis of the Urinary Incontinence Treatment Network Trials (E-UITN)
0.42 None (2008) F32HS017664 Assessment and prediction of costs and adverse health outcomes in COPD
0.41 NIMH (2009) RC1MH090770 Cost Effectiveness of a Home Support Program for Depression in Black Elders
0.41 None (2010) None Enhancing the Effectiveness of Physical Therapy in People with Knee OA
0.41 None (2011) R01HS020263 Innovative methods for modeling longitudianl medical costs

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(DGOS_1298) Microwave percutaneous ablation of 30 to 50 mm in diameter lung and liver tumours.
0.42 NCI (2008) R43CA126312 Circumferential Electrode Array for Radiofrequency Tumor Ablation
0.42 NCI (2008) R44CA126087 Minimally invasive microwave antennas for image-guided focal tumor ablation

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(DGOS_1335) "Comparison of Fluoride (18F) and Fluorocholine (18F) PET/CT and MRI ""whole body diffusion"" for detection of first bone metastasis of prostate cancer."
0.52 NCRR (2010) None RESPONSIVE MR AND PET AGENTS
0.49 NICHD (2008) Z01HD008735 Diagnosis, Pathophysiology And Molecular Biology Of Pheochromocytoma
0.47 NIBIB (2009) R01EB000993 Multimodal microPET and microMRI Imaging Instrumentation
0.46 NCI (2008) R01CA124573 PET to Measure Breast Cancer Bone Metastasis Response
0.44 NCI (2008) R01CA129356 18F-FACBC PET-CT for the Detection and Staging of Recurrent Prostate Carcinoma
0.43 NCI (2011) ZIABC010655 Prostate Cancer Imaging
0.43 NIBIB (2009) R01EB007349 Development of a Combined MRI-PET System for Contemporaneous Functional Imaging
0.42 NCI (2009) R01CA137254 Quantitative MR-PET for Therapy Assessment in Glioma Patients
0.41 NCI (2008) R01CA111479 Bone Metastasis Factor-1 in Prostate Cancer/Bone Interaction
0.41 NCRR (2009) P41RR002584 NOVEL AGENTS FOR DETECTING BONE METASTASIS
0.41 NICHD (2008) Z01HD008833 The differential diagnosis and treatment of Cushing's syndrome
0.41 NIBIB (2009) R01EB000194 Optimization of PET Imaging

(DGOS_1336) PREDICT.amm: Prediction of response to NSCLC treatments: use of molecular markers.

(DGOS_1465) Analysis of relationship between quantitative evolution of CTC and the RECIST response in patients enrolled in phase I trials
0.48 NCI (2010) None Characterization of biomarkers on circulating tumor cells to guide therapy
0.46 NCI (2010) None Automated Systems for Detection and Molecular Characterization of Circulating Tum
0.46 NCI (2009) R01CA141077 Circulating Tumor Cell Capture &Analysis in a Multi-Center Prostate Cancer Trial
0.46 NCI (2008) R43CA132420 Extracorporeal Thermo-ablation of Circulating Cancer Cells/Stem Cells Using Targe
0.45 NCI (2010) None High Sensitivity Detection and Isolation of Circulating Tumor Cells
0.45 NCI (2010) None 3D-Nanostrcutured Substrates for Detection of Circulating Tumor Cells
0.44 NCI (2011) R33CA157396 Advanced Development of An Integrated CTC Enrichment Technology
0.43 NCI (2011) R01CA139070 Detection of Carcinomas
0.43 NCI (2011) R03CA162520 Bionanoconjugates for Detection of Circulating Tumor Cells in Lung Cancer
0.43 NCI (2009) R21CA139373 In vivo molecular laser detection and treatment of circulating cancer stem cells
0.43 NCI (2010) None Molecular Detection and Profiling of Circulating Tumor Cells
0.42 NCI (2011) 261201100114C-0-0-1 TAS::75 0849::TAS "TOPIC 293, POINT OF CARE DEVICE FOR ANTIBODY INDEPENDENT ISOL
0.42 NCI (2008) R44CA122444 Multiplex Gene Expression in Single Cells for Circulating Tumor Cell Detection
0.42 NCI (2009) R43CA137893 Intravital Fiber-Optic Flow Cytometer
0.42 NCI (2010) None Targeted Therapy to Receptors for LH-RH in Prostate Cancer
0.41 NIBIB (2009) R01EB009230 Multifunctional nanotubes for in vivo detecting/purging circulating cancer cells
0.41 NIBIB (2010) None Point-of care Microfluidics for Early Detection of Cancer
0.41 NCI (2008) R01CA111359 High-speed reliable detection of cancer cells in blood

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(INCa_1466) "Sensitizing effect of NO in GTN/oxaliplatin synergy on tumoral cell death in vitro, in vivo and in patients; study of Fas signaling pathway."

(INCa_1467) Pre-clinical studies of adipose tissue injection on osteosarcoma development: innocuousness of liporemodelling in tumor context and therapeutic potential of MSC?
0.42 NHLBI (2009) R01HL073256 Functional dissection of human adipose and bone marrow-derived MSC phenotypes
0.41 NIDDK (2009) R03DK082757 Role of macrophages in MSC-mediated recovery of hematopoiesis after irradiation
0.41 NIAMS (2008) F32AR055029 Developing Biomaterial Scaffolds That Delay Senescence in Mesenchymal Stem Cells
0.41 NCI (2008) R01CA124996 The role of myeloid suppressor cells in tumor-specific tolerance
0.40 NHLBI (2010) None DEVELOPMENT OF IN VITRO MENSENCHYMAL STEM CELL NICHE
0.40 NIAMS (2009) R21AR057515 Targeting bone homing of the MSCs to augment bone formation
0.40 NIAMS (2010) None MSC Therapy &Immune Response in Children with Osteogenesis Imperfecta

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(INCa_1468) Study of the redifferenciation of melanoma cells after treatment with DP1 agonist receptor of prostanglandin D2
0.49 NCI (2008) R01CA138231 Melanoma Stem Cells, Vasculogenesis and Neoplastic Progression

0.49 NCRR (2011) P20RR016472 DIRECT INTERACTION OF ERISTOSTATIN WITH MELANOMA CELL SURFACE MOLECULES
0.49 NCI (2008) R03CA128045 Chemopreventive Activity of Selenium-Derivatives of Celecoxib in Melanoma
0.49 NCI (2008) R01CA124975 Validation of Grm1 as a Therapeutic Target in Melanoma
0.49 NCI (2008) R01CA124975 Validation of Grm1 as a Therapeutic Target in Melanoma
0.48 NCI (2008) R21CA129651 Thyroid Stimulating Hormone Promotes the Growth and Progression of Human Melanoma
0.48 NCI (2010) None Mechanism of Resistance to Arginine Deiminase Therapy in Advance Melanoma
0.47 NCI (2009) F32CA126252 Isolation and Characterization of Melanoma Tumor Stem Cells
0.47 NCI (2010) None The role of c-Met expression in melanoma growth and migration
0.47 NCI (2008) R01CA122484 Targeting Glycolytic Control of Melanoma Cell Survival
0.47 NCI (2008) R21CA125091 Prognostic Significance of Neuronal Differentiation of Cutaneous Melanoma
0.47 NCI (2009) R01CA077267 Invasive Behavior of Tumor Cells Producing Collagenase-1
0.47 NCI (2010) None Combination Therapy that Targets Glutamate Signaling in Melanoma
0.47 NCI (2008) R01CA125707 Multiscale modeling of leukocyte-tumor cell adhesion to endothelium in shear flow
0.47 NCI (2009) R21CA139473 A Phase II Trial of Riluzole in Patients with Advanced Melanoma
0.47 NCI (2009) P50CA093683 ABCB5 and Melanoma Stem Cells: Implications for Prognosis &Therapeutic Targeting
0.45 NCI (2011) R01CA157467 Reversing melanoma-induced T cell dysfunction
0.45 NIGMS (2008) SC2CA138175 Generation of an UV-dependent Mouse Model of Melanoma
0.45 NCI (2010) R01CA056821 Immunization Against Melanoma Differentiation Antigens

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(INCa_1470) Deciphering cell death pathways in myelodysplastic syndromes cell line exposed to Azacitidine

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(INCa_1472) Contribution of CNV to hereditary predisposition to cancer : A study in Lynch syndrome and Li-Fraumeni syndrome
0.43 NIDCD (2010) R21DC010912 Identification of new mechanisms for human congenital disorders
0.41 NCRR (2010) None THE MOLECULAR BASIS OF ROTHMUND-THOMSON SYNDROME AND OSTEOSARCOMA
0.41 NCI (2010) None Assessment of Inherited Colon Cancer Prediction Models in Diverse Populations

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(INCa_1473) Focalized Interstitial thermotherapy in prostate cancer: feasibility in animal model.

(INCa_1476) "Glioma pharmacolgy "

(INCa_1482) "The Influence of Lifestyle, Diet, Obesity and Inflammation on the Risk of Hepatocellular Carcinoma and Cholangiocarcinoma: A Comprehensive Prospective Investigation based on French and European Cohorts in the EPIC Study."

(INCa_1484) "Determinants of participation in breast cancer and cervical cancer screening and prevention in the Paris urban agglomeration, a study within the SIRS cohort."
0.44 NCI (2011) U54CA163313 Penn Center for Innovation in Personalized Breast Screening
0.43 NCI (2010) None Understanding and preventing breast cancer disparties in Latinas
0.43 NCI (2011) P01CA154292 Risk-Based Breast Cancer Screening in Community Settings
0.42 NCI (2008) R21CA127834 An Interactive Video Doctor to Encourage Cancer Screening

0.42 NCI (2008) R21CA132675 Improved Cancer Screening: Life Skills Training in S Texas Hispanic Communities
0.41 NCI (2009) R21CA139147 Breast &Cervical Cancer Screening among Hmong: Social, Cultural &System Factor
0.41 NCI (2010) None Comparative Modeling: Informing Breast Cancer Control Practice &Policy
0.41 FIC (2009) D43TW008325 Planning Grant: Cancer Research Training in Morocco
0.41 NCI (2010) None Early Detection of Common Cancers in Women in India
0.41 NCRR (2010) None CANCER RESEARCH CENTER
0.41 FIC (2011) D43TW009084 Research Training in Cancer Prevention and Control in Morocco
0.40 OD (2009) RC2CA148577 Comparative effectiveness of breast imaging strategies in community practice

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(INCa_1486) Articulation between Scientific Information and symbolic representations in doctors and patients relationship

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(INCa_1487) "TLR3, a novel therapeutic target in hepatocellular carinoma"
0.58 NCI (2008) Z01BC009254 Structure and Function of Toll-like Receptors
0.57 NCI (2010) None Structure and Function of Toll-like Receptors
0.57 NCI (2009) ZIABC009254 Structure and Function of Toll-like Receptors
0.56 NIDDK (2008) Z01DK034002 Proteins Of Innate Immunity: Tlr3 and dsRNA binding.
0.55 NCI (2008) K22CA122828 The role of Toll-like receptor 3 in overcoming cancer immunoediting
0.55 NINDS (2009) R21NS065260 Innate Immune Mechanisms of Motor Neuron Injury
0.54 NCI (2011) ZIABC009254 Structure and Function of Toll-like Receptors
0.52 NIA (2011) ZIAAG000332 Neuro-Immune Mechanisms in Brain Plasticity and Aging
0.51 NIDDK (2009) ZIADK034002 Proteins Of Innate Immunity: Tlr3 and dsRNA binding.
0.51 NIDDK (2010) None Proteins Of Innate Immunity: Tlr3 and dsRNA binding.
0.51 NHLBI (2008) R21HL091223 Role of TLR3-TRIF Variants in host susceptibility to viral myocarditis
0.50 NIDDK (2010) None The Role of Toll-Like Receptor-3 in T1D and Efficacy of a Novel Therapeutic
0.50 NIDDK (2010) None Toll-like receptors: full-length human TLR3 and the signaling protein hUNC93B1
0.50 NCI (2008) R01CA100882 Molecular Pathogenesis of Hepatocellular Carcinoma
0.49 NIDDK (2009) ZIADK036159 Toll-like receptors: full-length human TLR3 and the signaling protein hUNC93B1
0.49 NIA (2010) None Neuro-Immune Mechanisms in Brain Plasticity and Aging
0.48 NEI (2009) R21EY019778 Novel TLR3 inhibitors for geographic atrophy of age-related macular degeneration
0.48 NCRR (2009) P20RR016469 TLR3 SIGNALING IN PULMONARY MUCOSAL EPITHELIAL CELLS
0.47 NCRR (2010) None TLR3 SIGNALING IN PULMONARY MUCOSAL EPITHELIAL CELLS

(INCa_1488) Role of the gene polymorphisms of the immunoglobulin receptors FcgammaR3a et FCgammaR2a in the activity of cetuximab used in the palliative treatment of head-and-neck cancers.

(INCa_1489) Psychological and emotional impacts of participation in clinical trials in medical oncology

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(INCa_1490) HCV-induced liver carcinogenesis : analysis of TGF-beta pathway perturbations
0.65 NCI (2008) R01CA106307 TbetaRIII as a Mediator/Regulator of Signaling
0.65 NCI (2010) None TGF-betas in breast cancer progression
0.64 NCI (2009) ZIABC010881 Development of TGF-beta antagonists for cancer therapy

0.63 NCI (2011) ZIABC005785 TGF-betas in breast cancer progression
0.63 NCI (2008) R01CA102074 Androgen Control of TGF-beta signaling
0.63 NIGMS (2011) R01GM097591 Molecular Mechanisms Regulating Intercellular Transit of TGF-beta
0.62 NCI (2008) Z01BC010881 Development of TGF-beta antagonists for cancer therapy
0.62 NIDCR (2009) ZIADE000723 Molecular Roles of TGF-beta Signaling in Salivary Glands and Oral Cancer
0.62 NCI (2008) R01CA108509 Nucleocytoplasmic Trafficking of Smads
0.62 NCI (2008) R01CA114039 Use of Cystatin C to Combat TGF-Beta Tumorigenesis
0.62 NCI (2011) ZIABC010881 Development of TGF-beta antagonists for cancer therapy
0.61 NIDDK (2008) R01DK065772 Betaglycan as a modulator of TGF-beta signaling in hepatoma
0.61 NCI (2008) R01CA108509 Nucleocytoplasmic Trafficking of Smads
0.61 NIGMS (2008) R01GM068812 TAK1 Regulation of TGF-beta and IL-1 signaling
0.61 NIDDK (2008) Z01DK055106 Transforming Growth Factor - Beta Superfamily Signaling in Diabetes and Obesity
0.61 NCI (2008) Z01BC005785 TGF-betas in breast cancer progression
0.61 NCI (2009) F31CA142238 TGF-Beta signaling and microRNA processing: Implications for invasion and metasta
0.60 NCI (2010) None Development of TGF-beta antagonists for cancer therapy
0.60 NHLBI (2008) P01HL060231 Non-Smad Mechanisms of TGFBeta Signaling

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(INCa_1491) Early steps of NEoplastic transformation of LIver cells and interplays with Viral Infection
0.42 NIDDK (2010) None Designing a Microenvironment Niche for Liver-Specific Differentiation of hESCs
0.42 NIDDK (2008) R43DK083104 Towards the creation of HCV-resistant liver cells for transplantation
0.41 NIAID (2010) None Molecular Mechanisms of Pathogenesis of Acute and Chronic Liver Diseases
0.41 NIAID (2009) R21AI081055 Role of Pellino1 in liver inflammation
0.41 NIAID (2008) Z01AI000999 Molecular Mechanisms of Pathogenesis of Acute and Chronic Liver Diseases
0.40 OD (2009) R01DK085713 Modeling human hepatotropic infections in complex tissue organoids

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(INCa_1496) Modelisation of morbi-mortality of HCC in France across stage of severity: evaluation of different strategies according to amount of screening and therapeutic ressources
0.56 NCI (2010) R01CA132962 A Genetic Screen for HCC Genes
0.55 NCI (2010) None Metabolomic and Integromic Approaches to Identify Fingerprints for Early Detectio
0.55 NCI (2009) R21CA131856 Long Term Outcome for Liver Transplantation for Hepatocellular Carcinoma
0.55 NCI (2011) R01CA160738 Guideline-based surveillance and treatment of hepatocellular carcinoma
0.55 NCI (2008) F32CA136135 A Population-Based Analysis of Care and Outcomes for Hepatocellular Carcinoma
0.54 NCI (2010) None Novel Reagents For The Detection Of Low Abundance Cancer Specific Glycoforms
0.54 NIDDK (2008) R01DK069859 Genes Related to HCC Progression in LD and DD Transplant
0.54 NCI (2011) K07CA160722 Use and Comparative Effectiveness of Innovative Therapies for Hepatocellular Carc
0.54 NIDDK (2008) R03DK077707 Early Detection and Prognosis of Patients with Hepatocellular Carcinoma
0.54 NCI (2010) None A Multidisciplinary and Translational Approach to Hepatobiliary Malignancy
0.53 NCI (2011) R01CA139158 INVESTIGATION OF THE ROLES OF NUCLEAR RECEPTOR FXR IN HEPATOCELLULAR
0.53 NCI (2008) R03CA119313 Novel Machine Learning Methods for Analysis of MALDI-TOF Mass Spectrometry Data
0.52 NCI (2009) R01CA122359 Role of S-nitroso-glutathione Reductase in Hepatocellular Carcinoma

0.52 NCI (2008) R01CA123544 Biomarker for Hepatocellular Carcinoma
0.52 NCI (2011) 261201000034C-4-0-4 RRSS Evaluate Completeness Liver Cancer Reporting Under New Clinical Guidelines
0.52 NCI (2008) R01CA100882 Molecular Pathogenesis of Hepatocellular Carcinoma
0.51 NIDDK (2008) R01DK066840 Novel markers for HCV-related HCC
0.51 NCRR (2010) None INJURY-RELATED MORPHOGENIC PATHWAY SIGNALING AND HEPATOCARCINOGENESIS
0.51 NCRR (2011) P41RR005959 INJURY-RELATED MORPHOGENIC PATHWAY SIGNALING AND HEPATOCARCINOGENESIS

(INCa_1505) Identification and vallidation of new therapeutic targets of the replication initiation
0.45 OD (2008) DP2OD004433 The Molecular Interface of Replication Elongation and the Cellular Environment
0.44 NIGMS (2010) None Regulation of DNA replication by histone modifications
0.43 NIGMS (2009) R37GM041934 Cell Cycle and Sporulation in Bacillis Subtillis
0.42 NCI (2011) ZIABC010411 Initiation of DNA Replication in Mammalian Cells
0.42 NCI (2008) K99CA126182 Understanding the mechanism of KSHV latent DNA replication
0.42 NIGMS (2008) R01GM069462 Developmental control of replication by Drosophila RB
0.42 NCI (2010) R00CA136555 DNA Replication Control and Its Application to Selective Killing of Cancer Cells
0.41 NIGMS (2008) R01GM076663 The Role of the F-box Protein Dia2 in Cell Cycle Control
0.41 NIGMS (2009) R01GM084003 Control of elongation of DNA replication
0.41 NCI (2009) R01CA136933 Functional Analysis of Replication Stress Response Proteins
0.40 NIGMS (2010) F32GM093408 Regulation of DNA replication in B.subtilis by YabA

(INCa_1506) Quantification of overdiagnosis among the breast cancer screening programme of the Isere Departement.
0.47 NCI (2008) R21CA127834 An Interactive Video Doctor to Encourage Cancer Screening
0.47 NCI (2011) U54CA163313 Penn Center for Innovation in Personalized Breast Screening
0.46 NCI (2011) P01CA154292 Risk-Based Breast Cancer Screening in Community Settings
0.42 NCI (2008) F32CA125984 Modeling Breast Carcinoma In Situ: Implications for Prevention and Control
0.42 NCI (2008) R01CA079466 Statistical Methods for Breast Cancer Screening Studies
0.41 NCI (2008) R01CA126596 A Sustainable Approach to Increasing Cancer Screening in Community Health Centers
0.41 NCI (2009) R03CA139584 Compliance With Lung Cancer Screening
0.41 NCI (2010) None Surveillance, Epidemiology and End Results (SEER) - USC
0.41 NCI (2010) None Descriptive Studies and Record Linkage
0.41 NCI (2010) None Understanding and preventing breast cancer disparties in Latinas
0.41 NCI (2009) N01PC35138 Surveillance, Epidemiology and End Results (SEER) - New Mexico
0.41 NCRR (2010) None CANCER RESEARCH CENTER
0.41 NCI (2010) None TAS::75 0849::TAS
0.40 NCI (2010) None Autoregressive Joinpoint Analysis of Cancer Trend Data
0.40 NCI (2008) K07CA101780 Breast and Cervical Cancer Screening in Obese Women
0.40 NCI (2009) P30CA054174 CAREER DEVELOPMENT
0.40 NCI (2009) N02CN63300 Computer Support for Prostate Cancer Screening in the PLCO Cancer Screening Trial
0.40 NCRR (2011) G12RR003035 CANCER RESEARCH UNIT
0.40 NCI (2009) N02CN63300 Computer Support for Ovarian Cancer Screening in PLCO Cancer Screening Trials

(INCa_1508) Cancer stem cell roles in Glioblastoma response toward hadrontherapy and Temozolomide based chemo-radiotherapy.
0.45 NINDS (2009) F30NS063496 Targeting Brain Tumor Stem Cells
0.44 NCI (2008) K01CA123532 Identification, Isolation and Characterization of Prostate Cancer Stem Cells
0.43 NCI (2010) None PROSTATE CANCER STEM CELL-TARGETED ACTIVITY OF A NEW-GENERATION TAXOIDS
0.42 NCI (2009) ZIABC011031 Cancer stem cells and human liver cancer
0.42 NCI (2010) R21CA137485 GLI1 and Cancer Stem Cells in Ewing Sarcoma
0.41 NCI (2010) None A20 Promotes Glioma Stem Cell Mediated Tumorigenesis
0.41 NCI (2009) U01CA141468 Biology and Immunology of Pancreatic Cancer Stem Cells in a Novel Mouse Model
0.40 NIDCR (2011) R21DE021522 Isolation and characterization of the normal and cancer stem cells of the tongue.
0.40 NCI (2011) ZIABC010794 Characterization of Cancer Stem Cells
0.40 NINDS (2008) R21NS054235 Testing the Cancer Stem Cell Hypothesis: Role of CD133+ Cells as Tumor Stem Cells
0.40 NIDDK (2010) R03DK088013 Mechanisms of survival of liver cancer stem cells
0.40 NCI (2011) R21CA150085 PROSTATE CANCER STEM CELL-TARGETED ACTIVITY OF A NEW-GENERATION TAXOIDS

(INCa_1509) Redirecting cytotoxic T lymphocytes to leukemia antigens
0.43 NCRR (2010) None PHASE I STUDY OF THE ADMINISTRATION OF PERIPHERAL ACTIVATED T-CELLS OR EBV
0.43 NCRR (2011) M01RR000188 PHASE I STUDY OF THE ADMINISTRATION OF PERIPHERAL ACTIVATED T-CELLS OR EBV
0.41 NCI (2011) ZIABC011295 Optimizing the graft versus leukemia effect for pediatric ALL
0.40 NCI (2008) R01CA131027 Chimeric T Cell for Therpay of Hodgkin Disease

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(INCa_1511) Clinical assessment of brain tumor angiogenesis by MRI: quantification of the cerebral blood volume
0.43 NIBIB (2010) None Noninvasive MR imaging of cerebral arterial blood volume in humans
0.43 NCI (2008) R01CA082500 MRI Contrast Agent Methods of Assessing Tumor Angiogenesis
0.42 NINDS (2008) F31NS052971 Improved methods for perfusion imaging
0.42 OD (2009) RC1EB010384 Volumetric Perfusion MRI of Liver Tumors to Detect Early Response to Chemotherapy
0.41 NCI (2008) R01CA115745 Blood Flow MRI for Monitoring Glioma Angiogenesis

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(INCa_1512) Comprehensive analysis integrating both clinico-pathological and metabonomic data to improve prognosis in breast cancer patients

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(INCa_1514) "Towards a natural history of pilocytic astrocytomas: clinical, pathological and biological characteristics according to age"

(INCa_1515) Analysis of 6q candidate tumor suppressor genes in acute lymphoblastic leukemia

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(INCa_1517) The demethylating agents 5-azacytidine and decitabine exhibit therpeutic efficacy in myelodysplastic syndrome and acute myeloid leukemia BT altering DNA-damage response pathways

0.42 NCI (2009) R01CA138858 Optimizing decitabine regimen + formulation for nonDNA damaging DNMT1 depletion
0.41 NCI (2008) R01CA102031 Phamacological modulation of epigenetic changes in AML
0.41 NCI (2008) P01CA108631 Epigenetics of MDS

(INCa_1518) Role of the HLA-G non classical MHC class I molecule in tumor escape from immunosurveillance
0.49 NCI (2009) R01CA130967 TWEAK-Fn14 Signaling in the Tumor Microenvironment
0.48 NCI (2008) R01CA108856 Role of myeloid immune suppressors in tumor angiogenesis
0.48 NICHD (2009) R03HD057314 Functional Analysis of PAAN-AG5, the Baboon Counterpart of HLA-G5
0.48 NICHD (2008) R01HD045813 HLA-E, F, G interactions &the immunology of pregnancy
0.48 NCI (2008) P01CA106450 Project 5
0.47 NCI (2010) None The Role of T Cell Avidity in Determining Tumor Immunity and Autoimmunity
0.47 NCI (2011) R01CA149669 CD73 and tumor immunity
0.47 NIAID (2008) R01AI065361 Role of HLA-G on HIV Evasion of NK Cells
0.47 NCI (2009) ZIABC010955 The Role of T Cell Avidity in Determining Tumor Immunity and Autoimmunity
0.46 NIAID (2009) R56AI055923 Potential of HLA-G for Transplantation
0.46 NIDDK (2008) Z01DK054516 Role of the innate immune defenses in viral infections
0.46 NCI (2008) K08CA131097 The Role of Non-Hematopoietic Cells in Tumor Tolerance Induction
0.45 NCI (2010) None Analysis of immune suppressor mechanisms in patients with HCC
0.45 NINDS (2008) R01NS051439 Molecular Targeting and Imaging of Pituitary Adenomas
0.45 NICHD (2008) R03HD054439 Regulation of the baboon HLA-G-like class Ib MHC gene, Paan-AG
0.45 NIAID (2011) U19AI095230 Regulation and expression of HLA-G in asthmatic airways
0.45 NCI (2011) ZIABC010955 The Role of T Cell Avidity in Determining Tumor Immunity and Autoimmunity
0.45 NCI (2010) None Adoptive Transfer of AlloCTL for Immunotherapy of Recurrent Gliomas

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(INCa_1520) Evaluation of the effectiveness of transarterial chemoembolization for reducing waiting list dropout prior to transplantation for hepatocellular carcinoma : A multicentric and randomized control study

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(INCa_1522) HBV-replicating Hepatocellular Carninoma : association with differentiation and prognosis
0.70 NCI (2008) P01CA123328 TRANSGENIC MICE AS A MODEL FOR HBV REPLICATION AND ONCOGENESIS
0.69 NCI (2010) None Inflammation Variants and Risk of Hepatocellular Carcinoma in HBV Patients
0.69 NIDDK (2008) U01DK082916 Effect of HBV DNA Methylation and the Mutant 1762T/1764A on Viral Load and HCC
0.68 NIDDK (2008) R01DK078686 Genetic and epigenetic regulation of Hepatitis B contributes to liver cancer
0.66 NCI (2008) R01CA055578 Role of PreS2 Mutants in Pathogenesis of Chronic Hepatitis B
0.65 NCI (2010) None HEPATIC CARCINOGENESIS INDUCED BY HEPATITIS B VIRUS PreS2 MUTANT
0.64 NIAID (2009) R21AI083106 Virologic and Serologic Outcomes of Persons with HIV and HBV co-infection on Mono
0.63 NIAID (2008) R01AI073299 Mechanism and in vivo anti-HBV study of a novel class of non-nucleoside compounds
0.63 NIAID (2011) R21AI096958 Occult Hepatitis B Infection in South African HIV Patients
0.62 NIAID (2008) R01AI030070 Regulation of Hepatitis B Virus Transcription
0.62 NCI (2008) R01CA122295 Androgen Receptor Roles in Liver Cancer Incidence and Progression

0.62 NCI (2008) R01CA023931 Analyzing Hepatitis B Virus Pathogenesis
0.61 NIAID (2008) R01AI068885 Novel Therapeutic Approaches for Eliminating Hepatitis B Virus DNAs and RNAs
0.61 NCI (2008) R01CA040489 Pathogenesis of Hepatitis B Virus in Transgenic Mice
0.60 NCI (2011) R21CA158508 Virus-gene interactions during hepatic carcinogenesis
0.60 NIAID (2008) K23AI066983 HIV and Hepatitis B Coinfection: Hepatitis B Genotype, Resistance and Outcomes
0.60 NIAID (2009) R01AI079060 Immunological Priming to Hepatitis B Virus
0.60 NCI (2009) R21CA137067 IL-22 in HBV pathogenesis
0.60 NIAID (2008) R01AI060449 Liver Disease and HIV-HBV Coinfection in the HAART era

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(INCa_1532) "Hepatocellular carcinoma with dual differentiation: Clinicopathological, molecular and functional studies"
0.49 NCI (2010) R01CA132962 A Genetic Screen for HCC Genes
0.49 NCI (2011) ZIABC011031 Cancer stem cells and human liver cancer
0.48 NCI (2008) R01CA100882 Molecular Pathogenesis of Hepatocellular Carcinoma
0.48 NCI (2008) R01CA129414 Evaluation of novel FoxM1 inhibitors against liver cancer
0.48 NCI (2011) ZIABC011170 Comparative Functional Genomics
0.48 NCI (2010) None Metabolomic and Integromic Approaches to Identify Fingerprints for Early Detectio
0.47 NIDDK (2008) R01DK066840 Novel markers for HCV-related HCC
0.47 NCI (2011) R01CA139158 INVESTIGATION OF THE ROLES OF NUCLEAR RECEPTOR FXR IN HEPATOCELLULAR
0.47 NCI (2010) None A Multidisciplinary and Translational Approach to Hepatobiliary Malignancy
0.47 NCI (2010) R21CA149708 ErbB Receptor Signaling in DEN-induced Murine Hepatocarcinogenesis
0.46 NCI (2009) R01CA122359 Role of S-nitroso-glutathione Reductase in Hepatocellular Carcinoma
0.46 NIDDK (2008) K23DK064909 Complications of Cirrhosis in American Patients
0.45 NCI (2008) R01CA123544 Biomarker for Hepatocellular Carcinoma
0.45 NCI (2010) R01CA138540 Analysis of a novel regulator of hepatocellular carcinoma
0.45 NIDDK (2011) F31DK091980 The Contribution of Activated Hepatic Stellate Cells to Hepatocarcinogenesis
0.44 NCI (2008) F31CA136183 FoxM1 and Oncogenic Pathways in Hepatocellular Carcinoma
0.44 NIDDK (2008) R03DK077707 Early Detection and Prognosis of Patients with Hepatocellular Carcinoma
0.44 NCI (2009) R21CA133710 Targeting proapoptotic PKCdelta signaling in hepatocellular carcinoma
0.44 NCI (2010) None Epidemiologic Study of Hepatocellular Carcinoma in the US

(INCa_1534) Hepatocellular carcinoma in patients with uncomplicated alcoholic cirrhosis : incidence and predictive factors. A multicenter prospective cohort.
0.45 NIDDK (2008) K23DK064909 Complications of Cirrhosis in American Patients
0.45 NIDDK (2008) R03DK077707 Early Detection and Prognosis of Patients with Hepatocellular Carcinoma
0.44 NCI (2011) R01CA160738 Guideline-based surveillance and treatment of hepatocellular carcinoma
0.43 NCI (2008) K07CA106458 Molecular Epidemiology of Chronic Liver Diseases
0.43 NCI (2010) None Novel Reagents For The Detection Of Low Abundance Cancer Specific Glycoforms
0.41 NIAID (2010) None Molecular Mechanisms of Pathogenesis of Acute and Chronic Liver Diseases
0.40 NIDDK (2009) N01DK92319 Hepatitis C Clinical Trial-Clinical Center
0.40 NIDDK (2008) R01DK069859 Genes Related to HCC Progression in LD and DD Transplant
0.40 NCRR (2009) M01RR000827 A PHASE II, RANDOMIZED, CONTROLLED TRIAL OF THE SAFETY AND EFFICACY OF S-ADENOSY

(INCa_1535) Hepatocyte senescence in the sequence fibrosis-cirrhosis-HCC
0.43 NIAID (2009) R01AI049472 Xenogeneic Hepatocyte Transplantation for Cirrhosis
0.43 NIDDK (2009) R01DK080789 Role of Uhrf1 in Liver Development, Regeneration and Carciogenesis
0.42 NCI (2008) R01CA113602 IKKbeta:Bi-Functional Regulator of Hepatocyte Proliferation
0.42 NIDDK (2010) None Alternative human cell-based models of fatty liver disease
0.41 NCRR (2010) None ROLE OF HNF4ALPHA IN REGULATION OF HEPATOCYTE PROLIFERATION
0.41 NCRR (2011) P20RR021940 ROLE OF HNF4ALPHA IN REGULATION OF HEPATOCYTE PROLIFERATION
0.41 NIDDK (2008) R37DK046971 C/EBP beta SIGNALS HEPATOCYTE PROLIFERATION AND SURVIVAL
0.40 NIDDK (2011) R01DK055743 Transcriptional Regulation of Mammalian Hepatic Development
0.40 NIDDK (2009) R01DK075968 Nrf2, Hepatocyte Proliferation, and Liver Regeneration

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(INCa_1538) "CIRROX: Influence of iron depletion by bloodletting on the risk of hepatocellular carcinoma occurrence in patients with compensated alcoholic cirrhosis. Prospective, multicentre, randomized trial nested on the CIRRAL cohort."
0.48 NIDDK (2008) K23DK064909 Complications of Cirrhosis in American Patients
0.46 NCI (2011) R01CA160738 Guideline-based surveillance and treatment of hepatocellular carcinoma
0.45 NCI (2010) R01CA132962 A Genetic Screen for HCC Genes
0.45 NCI (2010) None Novel Reagents For The Detection Of Low Abundance Cancer Specific Glycoforms
0.45 NCI (2011) K07CA160722 Use and Comparative Effectiveness of Innovative Therapies for Hepatocellular Carc
0.44 NIDDK (2008) R01DK069859 Genes Related to HCC Progression in LD and DD Transplant
0.44 NCI (2009) R01CA122359 Role of S-nitroso-glutathione Reductase in Hepatocellular Carcinoma
0.44 NCI (2009) R21CA131856 Long Term Outcome for Liver Transplantation for Hepatocellular Carcinoma
0.44 NCI (2008) R01CA123544 Biomarker for Hepatocellular Carcinoma
0.43 NCRR (2010) None INJURY-RELATED MORPHOGENIC PATHWAY SIGNALING AND HEPATOCARCINOGENESIS
0.43 NCI (2011) R01CA139158 INVESTIGATION OF THE ROLES OF NUCLEAR RECEPTOR FXR IN HEPATOCELLULAR
0.43 NCRR (2011) P41RR005959 INJURY-RELATED MORPHOGENIC PATHWAY SIGNALING AND HEPATOCARCINOGENESIS
0.43 NCI (2010) None A Multidisciplinary and Translational Approach to Hepatobiliary Malignancy
0.42 NCI (2010) None Epidemiologic Study of Hepatocellular Carcinoma in the US
0.42 NCI (2011) 261201000034C-4-0-4 RRSS Evaluate Completeness Liver Cancer Reporting Under New Clinical Guidelines
0.42 NCI (2008) R03CA119313 Novel Machine Learning Methods for Analysis of MALDI-TOF Mass Spectrometry Data
0.42 NCI (2010) R21CA149708 ErbB Receptor Signaling in DEN-induced Murine Hepatocarcinogenesis
0.42 NCI (2008) R01CA127228 Mechanisms of PDGF-C Induced Hepatocellular Carcinogenesis
0.42 NCI (2010) None Initiation, persistence, and progression of hepatocellular carcinoma

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(INCa_1543) Hepatocellular carcinoma in non fibrotic liver: Epidemiology and identification of molecular pathways of hepatocarcinogenesis

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(INCa_1545) "The specific rates of 25-64 years old women without cytological cervical screening in an interval of three years among the patient of general practitioners in Gironde. An indicator to focus medical information and training on under screened areas and follow the impact on participation to uterine cervix screening in the county. "

0.43 NCI (2009) R21CA139147 Breast &Cervical Cancer Screening among Hmong: Social, Cultural &System Factor
0.42 NCI (2008) R21CA120635 Cervical Cancer Screening in Lesbians
0.41 NCI (2010) R01CA144835 Virtual Colonoscopy and Colorectal Cancer Screening
0.40 NCI (2008) R01CA126596 A Sustainable Approach to Increasing Cancer Screening in Community Health Centers

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(INCa_1547) Comparative evaluation of factors influencing men compliance for colorectal cancer screening and prostate cancer screening
0.62 NCI (2010) R01CA144835 Virtual Colonoscopy and Colorectal Cancer Screening
0.61 NCI (2011) U54CA163261 Studying Colorectal Cancer Effectiveness of Screening Strategies (SuCCESS)
0.58 NCI (2009) R03CA139584 Compliance With Lung Cancer Screening
0.58 NCI (2009) N02CN63300 Computer Support for Prostate Cancer Screening in the PLCO Cancer Screening Trial
0.56 NCI (2008) K07CA107052 Colorectal Cancer Screening in a Diverse Population
0.55 NCI (2008) R01CA112367 Improving Systems for Colorectal Cancer Screening
0.55 NCI (2008) R01CA126596 A Sustainable Approach to Increasing Cancer Screening in Community Health Centers
0.54 NCI (2011) R03CA150486 Community Context of Colorectal Cancer Disparities
0.54 NCI (2008) K07CA106780 Colorectal Cancer Decision Aids in Primary Care
0.53 NCI (2011) U54CA163313 Penn Center for Innovation in Personalized Breast Screening
0.52 NCI (2010) None Development of a Conjoint Analysis Instrument for Lung Cancer Screening Decisions
0.52 NCI (2009) N02CN63300 Computer Support for Ovarian Cancer Screening in PLCO Cancer Screening Trials
0.51 NCI (2009) N02CN63300 Computer Support for Lung Cancer Screening in the PLCO Cancer Screening Trial
0.51 NINR (2009) R21NR010754 Development of a culturally targeted patient navigation curriculum for LGBT adult
0.51 OD (2009) RC1CA146469 Role of Advanced Screening Technologies in Early Detection of Breast Cancer
0.50 NCMHD (2008) R24MD002805 Colorectal Cancer Education and Screening Program (CCESP)
0.50 NCI (2009) R21CA133376 Cancer Risks Beliefs &Screening
0.49 OD (2009) RC2CA148576 SEARCH: Cancer Screening Effectiveness and Research in Community-based Healthcare
0.49 NCI (2009) R03CA137825 Barriers to CRC in patients with mental illness.

(INCa_1549) Geographic and socioeconomic DIsparities in colorectal ADEnoma and cancer detection
0.45 NCI (2010) None RACIAL AND SOCIOECONOMIC DISPARITIES IN LUNG CANCER: A MULTIFACTORIAL ANALYSIS
0.44 NCMHD (2009) R01MD004598 Does Violence Against Women result in disparities in cancer care for women with b
0.44 NCI (2010) None Epidemiology
0.43 NCI (2010) None Cancer Survivorship: Decreasing the Risk of Colon Cancer Mortality
0.42 NCI (2008) K07CA114029 Mechanisms and Management of Familial Colon Cancer
0.41 NCI (2009) N01PC35138 Surveillance, Epidemiology and End Results (SEER) - New Mexico
0.41 NCI (2010) None Patterns of Patient Care in Appalachia

(INCa_1554) Non medical characteristics of inequalities intreatment and survivorship of prostate cancer
0.48 NCI (2008) R01CA114524 Race, Comorbidity &Long Term Prostate Cancer Outcomes
0.48 NCCAM (2008) F31AT005042 Guggulipid for the chemoprevention of prostate cancer
0.47 NCI (2010) None Pilot Project
0.47 None (2009) U01DP000253 Breast and Prostate Cancer Data Quality and Patterns of Care Study
0.47 NCI (2011) R03CA158054 Understanding and Promoting Health Literacy (R03)
0.47 NCI (2008) R01CA113580 Stat5 in Progression of Prostate Cancer
0.46 NCI (2008) P50CA105641 Determinants of Disparity in Prostate Cancer Outcomes
0.46 NCI (2008) P50CA058236 SPORE In Protate Cancer
0.46 NCI (2008) R01CA111846 Prx1 in malignant progression of prostate cancer
0.46 NCI (2011) ZIACP010180 Prostate Cancer Studies
0.46 NCI (2009) R01CA129127 The role of PKD3 in prostate carcinogenesis
0.46 NCI (2008) R21CA118362 Targeting Relaxin Signaling in Prostate Cancer
0.46 NCI (2011) R03CA143949 TRICHOMONOSIS AND PROSTATE CANCER RISK IN THE PLCO CANCER SCREENING TRIAL
0.45 NCI (2010) R01CA140217 Novel prostate cancer oncogenes identified by transposon mutagenesis
0.45 NCI (2008) R01CA105055 Association of inflammatory genes and prostate cancer
0.45 NCMHD (2008) P20MD002285 RESEARCH CORE
0.45 NCMHD (2010) None Cancer
0.45 NCI (2008) P50CA069568 SPORE in Prostate Cancer
0.45 NCI (2008) Z01CP010180 Prostate Cancer Studies

(INCa_1555) Social inequalities and cancer: Approach through chains of causality (pathways)
0.40 NCI (2010) None Epidemiology

(INCa_1559) "Risk factors of childhood neuroblastoma, nephroblastoma, brain tumors and hematopoietic cancers : the ESTELLE study"

(INCa_1560) Breast density and mammogram aspect as risk factors for breast cancer
0.73 NCI (2008) R01CA122844 Mapping Genes for Mammographic Breast Density
0.72 NCI (2011) F32CA163024 Subregional measurements of breast features to assess breast cancer risk
0.71 NCI (2010) R01CA128931 Identifying Genes for Mammographic Breast Density
0.69 NCI (2008) P01CA107584 Markers of Breast Density That Predict Cancer
0.68 NCI (2009) R01CA095545 Mammographic Density and Soy Isoflavones
0.67 NCI (2009) R03CA136071 Evaluation of 3D MRI-Based Quantitative Breast Density for Chemoprevention
0.67 NCI (2008) P01CA107584 Biological Basis of Breast Density and Cancer Risk
0.66 NCI (2009) R01CA106606 Diet and Breast Density over Time in US Chinese Women
0.66 NCI (2009) R01CA136871 Quantification of breast density using dual energy mammography
0.65 NCI (2008) R03CA135689 Isoflavones, equol producing status, and breast density in US Chinese women
0.65 NCI (2008) P01CA107584 Novel Imaging Methods to Determine Breast Density
0.64 NCI (2008) P01CA107584 Compositional and Functional Analysis of Breast Density in Human Tissue
0.63 NCRR (2010) None VOLUMETRIC BREAST DENSITY ESTIMATION USING BREAST SURFACE RECONSTRUCTED
0.63 NCRR (2009) P20RR011091 BREAST DENSITY BY DXA
0.63 NCI (2009) R01CA131332 Whole Genome Association Study of Mammographic Density

0.62 NCI (2009) R03CA135699 A pooled analysis of mammographic density and breast cancer risk
0.62 NCI (2008) F31CA113286 Association between prolactin and mammographic density
0.60 NCI (2008) R01CA106606 Diet and Breast Density over Time in US Chinese Women
0.60 NCRR (2009) P41RR001192 COMPARISONS OF MRI AND DOS IN MEASUREMENTS OF BREAST DENSITY

(INCa_1563) Assessment of exposure to persistant organic pollutants during critical time windows using a physiolocally-based pharmacokinetic model: application to a population-based case-control study on breast cancer (CECILE-study)
0.52 NCI (2010) None PEDIGREE: Prenatal Environmental Determinants of InterGenerational Risk
0.50 NCI (2010) None RISK FACTORS FOR TRIPLE-NEGATIVE AND HER2-OVEREXPRESSING BREAST CANCER AMONG HI..
0.50 NCI (2010) None Breast and Other Cancers in the California Teachers Cohort
0.49 NCI (2008) R03CA132575 Cardiovascular Risk Factors and Lifestyle Modification in Breast Cancer Survivors
0.48 NCI (2010) None Understanding and preventing breast cancer disparties in Latinas
0.48 NCI (2008) R01CA118914 Breast Cancer Risk and Molecular Change After Chernobyl
0.48 NCI (2008) R01CA119139 The Role of Prolactin in the Etiology of Postmenopausal Breast Cancer
0.47 NCI (2011) P30CA016086 Epidemiology
0.47 NCI (2011) P01CA151135 Reproduction, Lactation and Hormonal Factors in Breast Cancer Subtypes
0.47 NCI (2008) R01CA124558 Genetic Factors for Breast Cancer- A genome Wide Study
0.47 NCI (2009) K99CA126978 Circadian and Melatonin Pathway Genes in Breast Cancer Risk
0.47 NIEHS (2010) None Environmental and Genetic Risk Factors For Breast Cancer: The Sister Study
0.47 NCI (2010) None Growth Hormones and Breast Cancer Risk
0.46 NCI (2008) R01CA122756 Cell Cycle/Apoptosis Gene Variants and Breast Cancer Risk
0.46 NCI (2008) R01CA058860 Hereditary Breast Cancer: Genetic and Molecular Studies
0.46 NIEHS (2008) K01ES012645 Molecular Epidemiology of Xenoestrogen Exposure
0.46 NCI (2010) None Genome-wide association study of breast cancer in the African Diaspora
0.46 NCI (2010) R21CA139396 Genetic Variation Affecting Epigenome and Breast Cancer Susceptibility
0.46 NCRR (2009) M01RR000043 BLOOD TUMOR MARKERS FOR MOLECULAR DIAGNOSIS OF BREAST DISEASE AND MONITORING

(INCa_1564) Psychological disorders and breast cancer risk: a study on the E3N cohort
0.51 NCI (2008) R03CA132575 Cardiovascular Risk Factors and Lifestyle Modification in Breast Cancer Survivors
0.51 NCI (2010) None Breast Cancer
0.50 NCI (2008) R01CA122756 Cell Cycle/Apoptosis Gene Variants and Breast Cancer Risk
0.49 NCI (2010) None Understanding and preventing breast cancer disparties in Latinas
0.49 NCI (2008) R01CA119139 The Role of Prolactin in the Etiology of Postmenopausal Breast Cancer
0.49 NCI (2009) K07CA136758 Genetic variants in the PI3K pathway in mammographic density and breast cancer
0.49 NCI (2009) R03CA135688 Migraine, Migraine Medication Use, and Risk of Breast Cancer
0.48 NCI (2011) F32CA163024 Subregional measurements of breast features to assess breast cancer risk
0.48 NCI (2010) None Growth Hormones and Breast Cancer Risk
0.48 NCI (2011) P01CA151135 Reproduction, Lactation and Hormonal Factors in Breast Cancer Subtypes
0.48 NCI (2008) R01CA064277 Shanghai Breast Cancer Study
0.48 NCI (2008) Z01CP010182 Epidemiologic Field Studies
0.48 NCI (2008) R01CA058860 Hereditary Breast Cancer: Genetic and Molecular Studies

0.48 NIEHS (2010) None Environmental and Genetic Risk Factors For Breast Cancer: The Sister Study
0.48 NIGMS (2010) None Defining breast cancer risk: the role of genetic variations in DNA repair genes
0.47 NCI (2009) R01CA050385 Risk Factors for Breast Cancer in Younger Nurses
0.47 NCI (2009) ZIACP010182 Epidemiologic Field Studies
0.47 NCI (2008) R01CA124558 Genetic Factors for Breast Cancer- A genome Wide Study
0.47 NCI (2008) R01CA114534 Clock Genes, Night Work, and Breast Cancer Risk

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(INCa_1576) The mitochondrial genome sequence variants and breast cancer risk
0.53 NCI (2011) R01CA155767 A comprehensive approach to breast cancer susceptibility across the risk spectrum
0.53 NCI (2008) R01CA121245 COMMON AND RARE SEQUENCE VARIANTS IN BREAST CANCER RISK
0.53 NCI (2008) R03CA130050 Mitochondrial Haplogroups and Breast Cancer Risk
0.51 NCI (2009) P50CA089393 Variation in Receptor Tyrosine Kinases and Breast Cancer Risk
0.51 NCI (2011) F32CA162847 Obesity susceptibility loci and breast cancer risk in BRCA1 and BRCA2 mutation ca
0.50 NCI (2008) R01CA064277 Shanghai Breast Cancer Study
0.50 NCI (2008) R01CA128978 A genome-wide association study for breast cancer in BRCA1 mutation carriers
0.50 NCI (2011) R21CA157168 A novel biomarker and therapeutic target for breast cancer
0.49 NCI (2008) R44CA110403 Molecular Test for Inherited Mutations in Breast Cancer
0.49 NCI (2010) None Risk prediction methods
0.49 NCI (2011) K01CA160607 Genome wide association study of breast cancer subtype and survival in Latinas
0.49 NCI (2008) R01CA058860 Hereditary Breast Cancer: Genetic and Molecular Studies
0.49 NCI (2008) R01CA083855 Prophytactic surgery in carriers of BRCA 1/2 mutations
0.48 NCI (2010) R21CA139396 Genetic Variation Affecting Epigenome and Breast Cancer Susceptibility
0.47 NCI (2009) R21CA133080 Mitochondrial DNA Mutations in Pancreatic Cancer
0.47 NCI (2008) R03CA132155 Cancer Risks in Multi-ethnic Carriers of Unclassified BRCA1 Variants
0.47 NCI (2011) R01CA157744 Discovery of New Genes for Inherited Predisposition to Breast Cancer by Exome Seq
0.47 NHGRI (2010) None Sequencing regions assoc with breast cancer risk in European and African American
0.47 NCI (2011) R21CA162218 Sequencing to identify novel breast cancer risk factors in African American women

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(INCa_1580) Modified lung cancer risk by multiple exposures at work and environmental risk factors combined
0.49 NCI (2010) R01CA080180 Cancer Risks among Textile Workers in China
0.49 NCI (2008) R01CA080180 Cancer Risks among Textile Workers in China
0.48 NIEHS (2011) R13ES021144 The 21st Annual Conference of ISES: Advancing Exposure Science for Environmental
0.48 NCI (2009) ZIACP010123 Occupational and Environmental Determinants of Cancer among Women and Minorities
0.47 NIEHS (2010) None Neurologic function in children exposed to ambient manganese
0.47 NIOSH (2011) R01OH009943 ETIOLOGY OF COPD AMONG CONSTRUCTION WORKERS
0.45 NCI (2008) Z01CP010123 Occupational and Environmental Determinants of Cancer among Women and Minorities
0.45 NINDS (2008) U54NS058185 Exposure
0.43 NIEHS (2008) R01ES016531 Marietta Community Actively Researching Exposure Study
0.43 NIEHS (2008) R01ES014038 Effects of Long-Term Low Level Hydrogen Sulfide Exposure

0.43 None (2009) R01OH008777 Using New Technologies to Characterize and Reduce Whole Body Vibration Exposures
0.43 NCRR (2010) None Aerosol Management Platform with Exposure Chamber
0.43 NIEHS (2009) R01ES009411 Measurement Errors in Environmental Epidemiology
0.42 NIEHS (2009) R01ES016531 Marietta Community Actively Researching Exposure Study
0.42 OD (2009) 275200900111U-1-0-1 SERVICES FOR NATIONAL CHILDREN'S STUDY
0.42 NIEHS (2010) None In utero arsenic and H1N1 influenza- the role of CD8+ T cells in immunopathology
0.42 OD (2010) None Microbial Exposures across the Lifespan and Cancer Risk in Women
0.42 None (2008) R03OH009231 Occupational Exposure to Chlorinated Solvents and Cardiovascular Malformations
0.42 NIEHS (2008) R56ES015867 Occupational exposure and the developmental-basis of AD

(INCa_1581) Determinants and changes in psychological adaptation and quality of life during chemotherapy for diffuse large B cell non-Hodgkin's lymphoma in the vulnerable/frail elderly

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(INCa_1744) The role of the p53 mRNA-Mdm2 interaction in the DNA damage pathway.
0.80 NCI (2008) R01CA085679 Molecular Basis of p53-Induction to DNA Damage
0.79 NCI (2010) None The Role of MDM Proteins in Cell Growth and Tumorigenesis
0.79 NCI (2011) R01CA085679 MDM2 and MDMX function together as the p53 E3 ligase
0.79 OD (2009) R56CA077735 The Role of MDM Proteins in Cell Growth and Tumorigenesis
0.77 NCI (2008) R01CA077735 The Role of Mdm2 in Cell Growth and Tumorigenesis
0.77 NCI (2008) R01CA109636 Function and Regulation of MDMX
0.75 NCI (2008) R01CA127770 In vivo function of Mdm2 E3 ubiquitin ligase
0.75 NCI (2008) R01CA058316 Regulation of p53 tumor suppressor protein
0.75 NCI (2008) F32CA128331 Control of p53 function by Mdm2 E3 ubiquitin ligase
0.75 NCI (2009) R01CA131439 Mechanisms of Mdm2/Mdmx in repressing p53
0.74 NCI (2008) R37CA040099 Functional analysis of the p53 tumor suppressor
0.73 NCI (2008) P01CA118210 Targeting of MDM2 Family Proteins in Cancer
0.72 NCRR (2009) P20RR020152 DISSECTING ROLES OF MTBP IN OSTEOSARCOMA METASTASIS
0.72 NCRR (2011) P20RR020152 UNCOVERING THE MECHANISMS OF OSTEOSARCOMA METASTASIS SUPPRESSION BY MTBP
0.72 NCI (2010) R01CA109636 Function and regulation of MDMX
0.72 OD (2010) R03MH089489 High throughput screen for inhibitors of the mdm2/mdmx interaction
0.72 NCI (2009) R01CA100302 In vivo function and mechanism of the r-protein-Mdm2-p53 pathway
0.72 NCI (2010) None The Role of ATF3 in the DNA Damage Response
0.71 NCI (2008) R01CA100420 Oncogenic Function of a P53-Induced Phosphatase

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(INCa_1787) Characterization of EBV and cellular microRNAs variations in Lymphoproliferative Disorders: implication for early diagnosis and development of therapeutical tools
0.59 NIAID (2008) R01AI067968 Role and mechanism of action of Gamma herpesvirus microRNAs
0.54 NCI (2008) R01CA119917 Studying the role of KSHV-encoded microRNAs
0.51 NIAID (2009) R01AI077746 Role of microRNAs in the SV40 infectious cycle
0.50 NCI (2009) ZIABC010612 The Role of miRNA-mediated RNAI in the Biology of Cancer
0.50 NEI (2008) R21EY018707 Deep sequencing and characterization of novel mammalian retinal microRNAs
0.49 NCI (2011) ZIABC010612 The Role of miRNA-mediated RNAI in the Biology of Cancer
0.49 NIDDK (2011) R21DK089314 Coronavirus modulation of cellular microRNAs in the liver: role in hepatitis

0.49 NHLBI (2008) R01HL081612 MicroRNAs' Role in Hematopoietic Lineage Differentiation
0.49 NIGMS (2008) R15GM084451 Genetic Analysis of Conserved microRNAs in C. elegans
0.49 NIGMS (2008) R01GM079756 Evolution, Biogenesis, and Function of microRNAs
0.48 NIGMS (2008) F32GM084656 Regulatory Roles of miRNAs during Early Arabidopsis Embryogenesis
0.48 NIAID (2011) R21AI088423 Role of microRNAs in Coronavirus-induced lethal encephalitis
0.48 NCI (2008) Z01BC010612 The Role of miRNA-mediated RNAI in the Biology of Cancer
0.48 NCI (2009) P01CA134292 Functional Evaluation of microRNAs in Pancreatic Neoplasia
0.48 NIAMS (2010) R01AR056645 Role of microRNAs in skeletal development
0.48 NIAID (2011) R01AI089854 Functional Analysis of MicroRNAs in Lymphocyte Development and Immune Tolerance
0.48 NIGMS (2011) R15GM084451 Genetic Analysis of Conserved microRNAs in C. elegans
0.47 NHLBI (2011) ZIAHL006091 Regulation of lipid metabolism by miRNAs
0.46 NCI (2009) K99CA137860 Targets and functions of the Kaposi's Sarcoma associated herpesvirus microRNAs

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(INCa_1789) "The dependence receptor TrkC and its ligand NT-3 in neuroblastoma, from basic research to drug therapy"
0.47 NINDS (2010) None NT-3 gene therapy to improve peripheral nerve function induced by genetic defect
0.46 NINDS (2008) R01NS046716 Genetic remodeling of Vagal Afferent Organization
0.46 NCI (2009) ZIABC010390 Role of Neurotrophins in the Development of the Mammalian Nervous System
0.44 NCI (2008) Z01BC010390 Role of Neurotrophins in the Development of the Mammalian Nervous System
0.42 NIDCD (2011) R01DC009405 Reinnervation of inner hair cells following excitotoxic trauma

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(INCa_1803) "Stem cells, self-renewall and cancer"

(INCa_1818) Functional analyses and modeling of TET2-associated myeloid malignancies
0.49 OD (2009) RC1DA028422 Chemical modulators of Tet-family proteins
0.40 NICHD (2011) R01HD065812 Role of TET Proteins in ES Cell Pluripotency and Function

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(INCa_1822) "Prognostic and predictive impact of immunogenic cancer cell death, tumor infiltration by lymphocytes and genes controlling the anticancer immune response"
0.41 NCI (2008) R01CA127913 MyD88-bearing tumors in immune-regulation and chemo-resistance
0.41 NHLBI (2010) None Adoptive cell therapy for lymphoma: A study on the role of CD4 memory T cells in
0.41 NCI (2011) R01CA149669 CD73 and tumor immunity

(INCa_1841) Role of the inflammasome in the transition between tolerance and inflammation during chemo-or-radiotherapy of cancer
0.56 NIAID (2011) ZIAAI000566 GENE REGULATORY EVENTS IN ESTABLISHING MATURE T CELL TOLERANCE
0.55 NCI (2009) R01CA103320 IDO-expressing immunoregulatory dendritic cells
0.55 NCI (2011) R01CA101795 Novel Strategies for Immunotherapy of Cancer
0.55 NIAID (2010) None AhR activation in Th17 and Treg cell differentiation
0.54 NIAID (2009) U19AI082713 Lymphoid neogenesis and CD4+T cell differentiation in primary Sjogren's syndrome
0.52 NCI (2008) R01CA099985 Human Tregs in Ovarian Cancer

0.52 NIAID (2008) F32AI075761 TGFBeta, IL-6 &IL-23 in induction of pathogenic vs. regulatory T cells in vivo
0.52 NHLBI (2011) R01HL107522 T cell plasticity in atherosclerosis
0.51 NIAID (2011) R21AI091962 The Role of the Aryl Hydrocarbon Receptor in Intestinal Immunity
0.51 NIAMS (2009) R21AR056364 B1 Cell Induction of TH17 Cell Differentiation
0.50 NCI (2009) R01CA090327 The Role of CD4+ T Cells in Antitumor Immunity
0.49 NIA (2010) None The role of immunosuppressive cells in metastasis
0.48 NCI (2011) R01CA156685 Hypoxia and Regulatory T cells in Cancer
0.48 NCI (2008) Z01BC010707 Role of T regulatory suppression in autoimmunity and cancer
0.47 NINDS (2010) R01NS030843 T cell response to myelin proteolipid protein
0.47 NIA (2011) ZIAAG000443 Regulatory immune cells in immune suppression and metastasis
0.47 NCI (2008) R01CA116408 Antigen specificity, suppressive mechanism ®ulation of CD4+ regulatory T cell
0.47 NCI (2009) R01CA138587 Regulatory T Cells in Malignant Glioma
0.47 NIAMS (2010) None Psoriatic Regulatory T cell Dysfunction

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(INCa_1843) Human Anti-Tumor Immune Responses (HATIR) in Human Immune System (HIS) mice
0.46 NCI (2009) U01CA141451 Collaborative Innate-Adaptive Immune Regulation of Tumor Progression
0.45 NCI (2008) R01CA104392 Mechanism of Chaperone-Mediated Tumor Rejection
0.44 NCI (2011) R01CA149669 CD73 and tumor immunity
0.44 NCI (2008) P01CA109094 Augmentation of Anti-Tumor Activity in the Absence of B Cells
0.44 NCI (2011) R01CA157885 Innate anti-tumor immune responses
0.44 NCI (2011) R01CA154656 Mechanistic Dynamic Study of Intranodal Chemokine-aided Antitumor Immune Priming
0.43 NCI (2008) P01CA109688 Immune Escape in Human Cancer: Mechanisms and Therapeutic Implications
0.43 NCI (2010) None Analysis of myeloid derived suppressor cells in mice
0.43 NCI (2008) R21CA124457 Non-invasive imaging of tumor-reactive T cell subsets in vivo
0.43 NCI (2008) K99CA128825 Anti-melanoma Activity of Combined Lymphopenia and Immunotherapy
0.42 OD (2008) R56CA104996 Promoting Tumor Immunity by Cross-Linking B7-DC
0.42 NCRR (2009) P41RR005959 IMMUNOTHERAPEUTIC POTENTIATION OF ANTI-TUMOR VACCINE WITH RFA WITH MRI
0.41 NCI (2009) P50CA091956 An Immune Based Therapeutic Approach for Prostate Cancer
0.40 NCI (2008) R01CA117957 A mouse model of TGFbeta1 and tumor immunosurveillance in Squamous cell cancer
0.40 NCI (2010) None The Role of T Cell Avidity in Determining Tumor Immunity and Autoimmunity

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(INCa_1871) Graft vs leukemia potential of allogeneic NK cells in human hematopoietic transplantation for the treatment of residual disease in leukemias
0.43 NCI (2008) P50CA126752 Targeting Malignant Stem Cells in CLL
0.40 NINDS (2008) Z01NS002881 The Molecular Biology Of The Mammalian Brain
0.40 NIAMS (2010) None Processing and Preservation of Human Umbilical Cord Stem Cells for Cell Therapeut

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(INCa_1892) Protein precursors maturation by the convertases (PCs) in angiogenesis and lymphangiogenesis during development and tumorigenesis.

(INCa_1893) "Replication profile, S Phase Control and Common Fragile Site Instability"

0.41 NCI (2011) R01CA151245 The molecular basis of RECQ4-associated genetic disorders and cancer predispositi
0.41 NIGMS (2009) R37GM041934 Cell Cycle and Sporulation in Bacillis Subtillis
0.41 NCI (2011) ZIABC010411 Initiation of DNA Replication in Mammalian Cells

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(INCa_1915) Biomarkers identification in CNS relapse of diffuse large B cell lymphomas
0.44 NINDS (2010) None Comprehensive multimodal analysis of patients with neuroimmunological diseases
0.43 NINDS (2009) ZIANS003055 Comprehensive multimodal analysis of patients with neuroimmunological diseases

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(INCa_1925) Radioimmunotherapy of small peritoneal carcinomatosis using low energy electrons emitters
0.42 NCI (2010) None Fractionated, Dual-targeted radioimmunotherapy for follicular lymphoma
0.42 OD (2008) R56NS045103 Regulation of Neuronal Survival by the Rit GTPase
0.42 NINDS (2009) R01NS045103 Regulation of Neuronal Survival by the Rit GTPase

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(INCa_1929) Roles of microtubules and microtubule post-translational modifications during tumor cell invasion

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(INCa_1930) The Ral GTPases are new regulators of autophagy. Connections with their roles in tumorigenesis and cell survival
0.52 NCI (2010) None Targeting Ras-Ral GEF-Ral Effector Signaling for Pancreatic Cancer Treatment
0.52 NIGMS (2010) None Regulation of TOR Signaling and Autophagy in Drosophila
0.51 NCI (2008) R01CA130893 Role of Autophagy in Cancer
0.50 NCI (2010) None Role of autophagy in tumor cell death
0.50 NIA (2008) P01AG017617 AUTOPHAGY FUNCTION AND DYSFUNCTION IN ALZHEIMER'S DISEASE
0.50 NIA (2009) R01AG033082 Autophagy and protein translation in neural function &neurodegeneration
0.50 NIGMS (2008) R01GM062509 Regulation of Growth and Proliferation by Drosophila TOR
0.49 NCI (2010) None A Phase 0 Trial of Hydroxychloroquine in Patients with Stage III and IV Resectabl
0.49 NIGMS (2011) F32GM099319 The molecular basis for the induction of autophagy
0.48 NIGMS (2011) R01GM065227 The regulation of autophagy pathways in eukaryotic cells
0.48 NCI (2009) R01CA126792 Autophagy and Epithelial Cell Fate During Anoikis and 3D Morphogenesis
0.48 NHLBI (2011) ZIAHL005012 The role of autophagy in aging and metabolism
0.48 NIA (2010) None Gordon Research Conference on Autophagy series
0.48 NINDS (2008) R01NS060123 Neuronal Autophagy: a Cell-Autonomous Protection Mechanism
0.48 NCI (2010) None Autophagy and Epithelial Cell Fate During Anoikis and 3D Morphogenesis
0.47 NIGMS (2011) R01GM095567 Network organization of the human autophagy system
0.47 NHLBI (2010) None The role of autophagy in aging and metabolism
0.47 NIAID (2009) R01AI083375 Functional consequences of autophagy mutations in Crohn's disease.
0.47 NCI (2011) R01CA159314 Function of Atg6 and autophagy in growth control

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(INCa_1938) Dissection of molecular pathways essential to leukemia initiating cell function in T-cell acute lymphoblastic leukemia
0.49 NCI (2010) R01CA142874 Targeting PML for leukemia therapy.
0.48 NCI (2010) None Targeting PML for therapy in leukemia-initiating cells
0.44 NCI (2011) K99CA157950 Molecular Targets in T Lineage Leukemia

0.42 NCI (2011) K99CA157951 Pathway Dependence on Tyrosine Kinase TYK2 in T-cell Acute Lymphoblastic Leukemia

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(INCa_1946) Systems biology of Ewing's tumor: high-throughput phenotyping and mathematical modeling

0.51 NIDDK (2008) Z01DK056003 Mouse models of Desmoplastic Small Round Cell Tumor and Ewings sarcoma
0.46 NCI (2009) R01CA133662 Novel Compounds to Inactivate Oncogenic Fusion Proteins
0.45 NCI (2010) R01CA140394 EWS/FLI AND ITS TARGETS IN EWING'S SARCOMA
0.44 NCRR (2011) P20RR016475 FUNCTIONAL ANALYSIS OF EWING SARCOMA EWS/FLI1 PROTEIN
0.42 NCI (2008) R01CA087771 Defining Mechanisms of Tumorigenesis by EWS/ETS Fusions
0.41 NCI (2008) R01CA088004 Signaling Pathways that Determine Ewings Sarcoma Outcome

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(INCa_1962) Potentialization of iodine 131 metabolic radiotherapy after gene transfer of sodium/iodide symporter

0.47 NCI (2010) None RET/PTC-mediated Thyroid Tumorigenesis and NIS Modulation
0.43 NCI (2011) R01CA149669 CD73 and tumor immunity
0.43 NCI (2009) P50CA091956 Gene Therapy of Prostate Cancer Using Radioactive Iodine
0.43 NINDS (2008) R01NS051439 Molecular Targeting and Imaging of Pituitary Adenomas
0.43 NCI (2008) K08CA103859 Image-guided Gene and Virotherapy for Pancreatic Cancer
0.41 NCI (2008) R01CA108856 Role of myeloid immune suppressors in tumor angiogenesis
0.41 NCI (2011) R01CA164241 Molecular imaging and system dynamics of tumor virotherapy
0.41 NCI (2009) R01CA130967 TWEAK-Fn14 Signaling in the Tumor Microenvironment
0.41 NCI (2008) P01CA097012 Improved Gene Delivery and In Vivo Imaging
0.41 NIDDK (2008) R01DK041544 Molecular Characterization of the Sodium/Iodide Symporter (NIS)
0.40 NCI (2009) R01CA125614 Virotherapy for Relapsed Refractory Multiple Myeloma
0.40 NCI (2008) R01CA100634 Radiovirotherapy for Multiple Myeloma

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(INCa_1965) Optical diagnosis persurgery in breast cancer

0.40 NCI (2010) None Terahertz Imaging in Breast Cancer Detection

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(INCa_1971) Cytidine hyperediting of chromosomal DNA

(INCa_1976) "Functional basis of genetic susceptibility due to a common polymorphism in TP53 intron 3: effect on alternative splicing and on the synthesis of DeltaNp53, an isoform which counteracts p53 function."

0.47 NCI (2009) R44CA124001 p53 Fusion Protein as an Oncology Therapeutic
0.46 NCI (2009) R01CA138688 Convergence of MicroRNAs and p53 Signaling in Multiple Myeloma: Environmental Co
0.45 NCI (2008) R01CA102188 Mechanism of p63-Dependent Tumor Suppression
0.45 NCI (2011) R01CA156706 Alternative Mechanisms to Inactivate p53 During Oncogenesis
0.44 NCI (2008) R01CA093853 The role of p63 and p73 in cancer
0.44 NCI (2011) ZIABC005599 Tumor Suppressor Protein, p53
0.44 NCI (2009) R01CA134796 Investigating the role of p73 and its isoforms in tumorigenesis and metastasis
0.44 NCI (2011) R01CA156706 Alternative Mechanisms to Inactivate p53 During Oncogenesis
0.44 NCI (2010) None Tumor Suppressor Protein, p53
0.44 NCI (2008) R01CA061449 Mechanisms of Genetic Instability and Tumor Suppression
0.43 NCI (2008) P01CA087497 Regulation and Interactions of the p53 Family
0.43 NCI (2008) R01CA121137 Molecular Oncogenic Properties of Mutant p53

0.43 NCI (2009) R01CA098821 Mechanisms of p53 activation in tumorsuppression
0.42 NCI (2008) R37CA040099 Functional analysis of the p53 tumor suppressor
0.42 OD (2008) R21NS063874 Identification of Small Molecules for Reactivation of p53 Cancer Mutants
0.42 NCI (2009) ZIABC005599 Tumor Suppressor Protein, p53
0.42 NCI (2011) ZIABC011261 Molecule-Guided Investigations into p53 Biology
0.42 NCI (2008) R01CA076069 Mechanism of p53-Mediated Tumor Suppression
0.42 NCI (2011) F32CA162681 Identifying novel p53 target genes that mediate tumor suppression

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(INCa_1983) Reactivation of the embryonic TWIST gene: a link between early phases of tumor progression and metastatic dissemination

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(INCa_2001) Crosstalk between the non-genomic (activation of kinase cascades) and genomic effects of Retinoic Acid : deregulation in cancers

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(INCa_2002) Nuclear architecture and chromatin structure in genome integrity and DNA repair
0.47 NIGMS (2008) R01GM083010 Etiology of Chromosome Translocations
0.46 NIAID (2008) R21AI076747 Exploring the Mechanisms of 53BP1-driven Immune Deficiency and DNA Repair
0.44 NCI (2011) R01CA151367 Non-Homologous End Joining Repair in Humans
0.44 NIGMS (2010) None Break-induced replication and genome rearrangements
0.43 NIGMS (2008) F32GM079015 C.elegans CHK-2 in meiotic chromosome organization
0.42 NCI (2011) F31CA163530 Mechanisms underlying the generation of oncogenic chromosomal translocations
0.42 NIGMS (2011) F32GM096701 Role of Chromatin and ATP-dependent Remodeling on DNA DSB Processing
0.42 NCI (2008) R01CA095641 Chromatin's Role in Repair of Radiation-induced Damage.
0.42 NCI (2011) ZIABC011282 RNAi screen for chromatin modifiers in DNA repair and aging
0.41 NIGMS (2009) R01GM084020 METNASE ROLES IN NHEJ, DNA INTEGRATION AND TRANSLOCATION
0.41 NIGMS (2008) R01GM084242 Amplification of Risk Caused by Mis-Routing of DNA Double-Strand Break Repair
0.41 NIGMS (2009) R01GM061766 Arrest, Recovery, and Adaptation from DNA Damage
0.41 NCI (2010) None Repair of DNA double-strand breaks with damaged ends
0.41 NCI (2010) R01CA139429 EPIGENETIC CONTROL OF NHEJ DNA REPAIR
0.40 NCI (2011) R01CA159826 Chromatin Modulation Associated with DNA Breakage and Repair in Human Cells
0.40 NIAID (2010) R01AI023283 Molecular Basis of Immunoglobulin Heavy Chain Switch

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(INCa_2048) Signaling pathways activated by oncogenic mutations of the tyrosine phosphatase Shp2: Quantitative phosphoproteomics and functional analysis.
0.58 NHLBI (2008) R00HL088514 Molecular Pathogenesis of the Cardiomyogenic Defects in LEOPARD Syndrome
0.56 NCI (2008) P01CA118210 Development of SHP2-selective Phosphatase Inhibitors for Cancer Therapy
0.55 OD (2009) R56CA077467 Modulation of ErbB Signaling
0.54 NCI (2010) None Small Molecule Inhibitors for the Oncogenic Protein Tyrosine Phosphatase SHP2
0.53 NCI (2008) R01CA114945 Role of Gab2 and Shp2 in Hematopoietic Signalling
0.53 NIDDK (2009) R01DK075916 Coordinated regulation of signaling events for insulin biosynthesis and secretion

0.52 NCI (2008) R01CA124940 SHP2-Mediated Synergy Between EGFR/HER2 and Beta Catenin in Breast Oncogenesis
0.52 NCI (2009) R37CA049152 Signal Transduction by Non-transmembrane PTPs
0.52 NHLBI (2010) None PI3K Signaling in Juvenile Myelomonocytic Leukemia
0.51 NHLBI (2009) R01HL096125 Tyrosine Dephosphorylation and Blood Cell Development
0.51 NCRR (2010) None TYORISINE PHOSPHATASE SHP2 IN HEMATOPOIETIC STEM CELL PROPERTY MAINTENANCE
0.50 NCRR (2011) P20RR025179 TYORISINE PHOSPHATASE SHP2 IN HEMATOPOIETIC STEM CELL PROPERTY MAINTENANCE
0.49 NHLBI (2009) R01HL097805 HLA-G - LILRB - SHP2 Axis in Airway Smooth Muscle
0.48 NICHD (2011) R21HD070716 Targeting SHP2 phosphatase for treatment/prevention of hematologic malignancies i
0.43 NHLBI (2008) R01HL044977 Autocrine/Paracrine Growth Factors &Lung Morphogenesis
0.42 NHLBI (2008) F32HL091664 PKC delta modulation of pulmonary endothelial barrier function via SHP2 and Src
0.40 NHLBI (2011) R01HL106158 Flow Responsive Mediators of Inflammation and Survival

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(INCa_2054) The regulation of membrane dynamics and post-translational modification that define the plasticity of Fas receptor signalling in colorectal adenocarcinoma: potential biomarkers of rectal cancer treatments
0.57 NCI (2011) R01CA112240 The role of Fas as tumor promoter
0.55 NCI (2010) None Targeting Fas Inhibitors in Cancer Therapy
0.54 NIAID (2008) R01AI072627 Fas in host defense and autoimmune diseases
0.54 NCI (2008) R43CA126726 Fatty Acid Synthase Phosphorylation as a Cancer Biomarker
0.53 NIDDK (2011) R03DK091490 Preservation of liver function through modulation of Fas-binding proteins
0.53 NIGMS (2010) None Elucidating the Fas-activated inflammation-signaling complex (FISC)
0.52 NHLBI (2008) R01HL076340 Regulation of Fas-Mediated Lung Cell Apoptosis
0.52 NIAMS (2009) ZIAAR041133 programmed cell death in regulation of autoimmunity
0.52 NINDS (2008) P01NS030318 Fas-Mediated Cell Death in TBI
0.51 NCI (2008) R01CA114104 Fatty acid synthase inhibitors and prostate cancer
0.51 NIAMS (2008) Z01AR041133 programmed cell death in regulation of autoimmunity
0.51 NINDS (2008) F32NS055547 Genetic Analysis of Fas in Motor Neuron Cell Death
0.50 NINDS (2008) R01NS056422 Role of Fas death receptor signaling in motor neuron degeneration
0.50 NCI (2008) K99CA131472 Fatty Acid Synthase, Caveolin-1 and Membrane Microdomains in Prostate Cancer
0.49 NHLBI (2008) R01HL079331 Redox-based Fas signaling in allergic airway disease
0.48 NCI (2008) R33CA112148 "Enhancement of Brain Tumor Immunotherapy by Fas-L RNAi"
0.47 NINDS (2008) R01NS047447 Initiation of Cell Death after Traumatic Brain Injury
0.47 NHLBI (2009) R01HL079331 Redox-based Fas Signaling in Allergic Airway Disease
0.47 NCI (2008) R01CA113564 Inhibition of Fas-apoptosis in Gastric Cancer

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(INCa_2078) MYC-mediated oncogenesis in aggressive T-cell Acute Leukemia
0.53 NCI (2008) K99CA127134 Dissection of the feedback inhibition of c-Myc by L11
0.53 NCI (2008) R01CA125760 Regulation of c-Myc Transcriptional Activity and Function
0.52 NCI (2010) None Cellular Mechanisms Controlling Myc Protein Stability
0.52 NCI (2010) R01CA080320 Myc Oncogene Mutations and Polymorphisms in Cancer
0.52 NCI (2009) R15CA139425 Modulation of c-MYC Functions in an HTLV-1 Model for Carcinogenesis
0.52 NCI (2008) R01CA129040 c-Myc Phosphorylation Sites Regulate Its Apoptotic and Tumorigenic Potential

0.52 NCI (2008) R01CA078259 C-N-, and L-MYC Effects on Hematopoietic Cells
0.51 NCI (2008) R01CA129828 Role of ribosomal proteins in regulating c-Myc
0.51 NCI (2008) F32CA132307 Phosphorylation sites that regulate c-Myc's proliferative and apoptotic functions
0.51 NCI (2008) R01CA105033 Regulation of and by the Myc Oncoprotein
0.48 NCRR (2009) P20RR017698 DEFINING THE ROLE OF C-MYC IN INTESTINAL CANCER AND NEOVASCULARIZATION
0.46 NCI (2008) R01CA109586 Control of c-Myc Function by the Tumor Suppressor p19ARF
0.44 NCI (2008) K08CA133103 Zebrafish Chemical and Classical Genetics Approach to the Pathogenesis of T-ALL
0.44 NCI (2011) K99CA157950 Molecular Targets in T Lineage Leukemia
0.43 NCI (2008) P01CA068484 Zebrafish Screens for Genetic Modifiers and Human Application in T-ALL
0.42 NCI (2008) R01CA042486 Glycosylation and Cancer
0.42 NCI (2008) R01CA084069 Mechanisms of Cell Cycle Associated Neoplasia
0.42 OD (2011) R03MH095559 Discovery of small molecule inhibitors of c-Myc/Mac dimerization and DNA binding
0.42 NCI (2011) K99CA157951 Pathway Dependence on Tyrosine Kinase TYK2 in T-cell Acute Lymphoblastic Leukemia

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(INCa_2117) Alcohol Task Force in Picardie
0.61 NIAAA (2009) F32AA018597 fMRI of Alcohol Cue Reactivity with Adolescents At Risk for Alcohol Use Disorders
0.58 NIAAA (2011) R01AA019777 Alcohol Advertising, Drinking and Driving: An Econometric Study of Underage Youth
0.58 NIAAA (2011) R01AA020063 Acute Alcohol Use and Suicide
0.58 NIAAA (2010) R01AA018335 Effects of Acute and Chronic Alcohol on Brain Reward in Mice
0.57 NIAAA (2010) R21AA018175 Neighborhood Socioeconomic Status and Alcohol Outcomes: Moderators and Mediators
0.57 NIAAA (2009) R01AA016300 Early Intervention to Engage Parents in Socializing Children Against Alcohol Use
0.55 NIAAA (2011) R13AA020158 Alcohol SBI Research Conference
0.55 NIAAA (2008) R15AA016640 Alcohol Absorption in Human Behavioral REsearch
0.55 NIAAA (2010) None Effects of Ghrelin on Alcohol Cue Reactivity and Craving
0.55 NIAAA (2008) F32AA017024 Alcohol exposure and airway hypperresponsiveness
0.55 NIAAA (2008) N01AA32007 Alcohol and Epidemiological Data System (AEDS)
0.55 NIAAA (2008) R01AA013929 Neurosteroids and acute Alcohol Intoxication in Humans
0.55 NIAAA (2008) R01AA016592 Work Stress and Alcohol Use: A National Study of Unresolved and Unexplored Issues
0.54 NIAAA (2008) Z01AA000466 Alcohol Pharmacokinetics and Pharmacodynamics in Humans
0.54 NIAAA (2008) P60AA013759 Center to Prevent Alcohol Problems Among Young People
0.54 NCRR (2010) None GABA GENES, NEUROENDOCRINE FUNCTION, ALCOHOL SENSITIVITY AND RISK FOR ALCOHOLISM
0.54 NIAAA (2009) P60AA011998 Project 8. Alcohol and Executive Cognitive Function
0.54 NIAAA (2011) R21AA018709 Role of the Endocannabinoid Signaling in Fetal Alcohol Spectrum Disorders
0.54 NIAAA (2009) R01AA013618 The Molecular Basis of Alcohol's Actions

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(INCa_2125) Quit smoking alone
0.50 NCI (2009) R01CA141587 Health Advocates as a Vehicle to Improve Treatment for Smokers in Public Housing

0.50 NIDA (2009) K23DA025049 Developing a Smoking Cessation Intervention for Methadone Maintained Smokers
0.49 NIDA (2008) R01DA023507 Treatment of Smoking Among Individuals with PTSD
0.49 NCI (2009) R01CA134861 Increasing Young Adult Smokers' Demand for Internet-Based Cessation Treatment
0.48 NCI (2008) R15CA133152 Moralization, Risk Perceptions, and Smoking Cessation in the U.S. and Denmark
0.46 NIDA (2010) None Center for Adaptive Treatment of Cigarette Addiction
0.46 NIDA (2008) K08DA021311 Influence of Nicotine on Positive and Negative Affect in Smokers with PTSD
0.46 NCRR (2010) None FUNCTIONAL NEUROANATOMY OF ACUTE NICOTINIC MODULATION OF IMPULSIVITY IN WOMEN
0.46 NIDA (2009) R21DA026580 Developing behavioral treatment approaches for obese tobacco quit line users
0.46 NIDA (2010) None Culturally Targeted &Individually Tailored Smoking Cessation Study: LGBT Smokers
0.46 NIDA (2009) R21DA027142 Examining a Text Message Intervention for Smoking Cessation
0.45 NCI (2011) R21CA149817 Feasibility of a Web-based Smoking Cessation Program for Vocational Students
0.45 NCI (2008) K07CA121037 Ecological Monetary Assessment of Smoking Cessation in Spanish-Speaking Smokers
0.45 NIDA (2009) F31DA025421 Walk Away from the Habit: Overcoming Nictotine Dependence through Exercise
0.45 NCI (2008) R01CA107444 Randomized Trial on Web-based Quit Smoking Program
0.45 NIDA (2008) R01DA020872 Nicotine Receptor Density &Dopamine System Function in Smokers: Treatment Effect
0.45 NIDDK (2009) R21DK084517 Developing Genetic Education for Smoking Cessation
0.45 NIDA (2008) R21DA023049 Modafinil and Smoking Cessation
0.45 NIDA (2009) R21DA026829 Smoking abstinence and lapse effects in smokers with schizophrenia and controls

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(INCa_2128) "Determinants of tabaco, alcohol and drug consumption in young adults in Reunion Island"
0.41 NIAAA (2008) R01AA015591 Media Influences on Early Onset Alcohol Use
0.41 NIAAA (2008) R21AA016307 Neurogenesis and neurodegeneration in adolescent binge alcohol exposure

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(INCa_2349) "Original access to new heterocyclic structures through organometallic chemistry, study of their biological targets along with anticancer evaluation."

(INCa_2356) Involment of transcription factors of FOXO family in acute myeloid leukemia

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(INCa_2357) Mechanisms of leukemogenesis in chronic myelomonocytic leukemia

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(INCa_2358) Modelling the impact of antigenic and inflammatory signals on the incidence and nature of mature B cell neoplasias in mice

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(INCa_2801) Control of T cell-Immune Response by Transforming Growth Factor beta
0.70 NIAMS (2010) None TGF-beta and Common gamma-Chain Cytokine Crosstalk in T Cell Regulation
0.69 NIDDK (2008) Z01DK055106 Transforming Growth Factor - Beta Superfamily Signaling in Diabetes and Obesity

0.68 NCI (2008) R01CA106307 TbetaRIII as a Mediator/Regulator of Signaling
0.68 NCI (2008) R01CA108509 Nucleocytoplasmic Trafficking of Smads
0.68 NCI (2008) R01CA102074 Androgen Control of TGF-beta signaling
0.68 NIDDK (2008) R01DK065772 Betaglycan as a modulator of TGF-beta signaling in hepatoma
0.67 NCI (2008) R01CA108509 Nucleocytoplasmic Trafficking of Smads
0.66 NCI (2011) ZIABC005785 TGF-betas in breast cancer progression
0.65 NIGMS (2011) R01GM097591 Molecular Mechanisms Regulating Intercellular Transit of TGF-beta
0.65 NCRR (2009) P20RR016453 CAVEOLIN-1 IN CARDIAC REMODELING
0.65 NHLBI (2008) P01HL060231 Non-Smad Mechanisms of TGFBeta Signaling
0.65 NIGMS (2008) R01GM055816 TGF Beta Receptor Dynamics
0.65 NIGMS (2008) R01GM068812 TAK1 Regulation of TGF-beta and IL-1 signaling
0.65 NCI (2010) None TGF-betas in breast cancer progression
0.64 NIDCR (2009) ZIADE000723 Molecular Roles of TGF-beta Signaling in Salivary Glands and Oral Cancer
0.63 NIDCR (2009) ZIADE000101 TGF-beta Regulation of Mucosal and Systemic T Cell Immunity and Tolerance
0.63 NCI (2008) Z01BC010881 Development of TGF-beta antagonists for cancer therapy
0.63 NIDCR (2008) R01DE012711 TGF BETA SIGNALING AND CRANIOFACIAL MORPHOGENESIS
0.63 NCI (2008) R01CA114039 Use of Cystatin C to Combat TGF-Beta Tumorigenesis

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(INCa_2828) Investigating Polycomb Group Proteins Recruitment in Mammals
0.46 NIGMS (2010) R01GM090278 Polycomb complexes targeted to specific loci by non-coding RNA co-factors
0.41 NIGMS (2011) R01GM064844 Repression via Facultative Heterochomatin.
0.41 NIGMS (2008) R01GM068804 Mechanisms of Polycomb Silencing
0.40 NIA (2009) K01AG033724 Polycomb-mediated epigenetic mechanisms in neurodegeneration and aging brain

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(INCa_3217) Cell migration in confined environment
0.41 NIAID (2008) F31AI080286 Role of Cytokines in the Persistence of Tolerized T Cells
0.40 NIGMS (2008) R01GM078526 Regulation of in vivo cell migration by the polarity protein Par-1

(INCa_3218) Predicting MOONLIGHTing proteins from protein-protein interaction networks
0.48 NIGMS (2009) R01GM088242 Regulation of heterotrimeric G proteins by non-receptor activators
0.46 NIEHS (2008) P30ES006639 CORE-- Protein Interactions and Proteomics Facilities
0.46 NCI (2008) R21CA126700 Effective Mammalian Two Hybrid Screening Approach
0.45 OD (2010) None Very large datasets and new models to predict and design protein interactions
0.45 NINDS (2008) F32NS049672 In vivo mechanisms of RGS protein function in C. elegans
0.45 NIGMS (2009) R01GM030355 G Protein-Coupled Receptors - Structure and Regulation
0.44 NCRR (2009) P41RR001081 PREDICTION AND DESIGN OF PROTEIN INTERACTION SPECIFICITY
0.44 NIGMS (2008) R01GM041883 Genetics of Bacterial Thiol Redox Proteins
0.44 NIDCR (2008) R01DE013404 ENAMEL MATRIX PROTEIN INTERACTION
0.43 NIDA (2008) R01DA004087 Opioid Receptor Mechanisms
0.43 NIGMS (2008) R01GM083081 Functional Motions of Modular Signaling Proteins
0.43 NIEHS (2008) R01ES010056 Protein targets of environmental chemicals
0.43 NIGMS (2009) R01GM085188 Protein recognition for modular domains
0.42 NCRR (2011) P41RR010888 CHARACTERIZATION OF HUNTINGTON AND PARKINSON AGGREGATES BY MASS SPECTROMETRY
0.42 NIGMS (2008) R01GM076275 Predicting and analyzing protein interaction networks
0.42 NIGMS (2008) R01GM030355 G Protein-Coupled Receptors - Structure and Regulation

0.42 NIGMS (2009) R01GM084174 Analysis of Protein-Ligand Binding on the Proteomic Scale
0.42 NCRR (2011) P41RR001081 PREDICTION AND DESIGN OF PROTEIN INTERACTION SPECIFICITY
0.42 NIGMS (2008) R21GM077385 Monotonously Ordered Peptide Elements

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(INCa_3260) A Phase II trial of GDC-0449 in patients with advanced chondrosarcomas

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(INCa_DGOS_1302) Deciphering the genetic heterogeneity of diffuse large b-cell lymphoma in the rituximab era : a translationnal and exploratory GELA project (the GHEDI GELA project)

(INCa_DGOS_1304) "Targeted antitumoral photodynamic therapy: novel retinoblastoma treatment, treatment follow-up by 1H/23Na MRI. Preclinical studies."
0.41 NCI (2009) P01CA055791 PDT - Mechanisms and Strategies for Optimization
0.40 NCI (2010) P01CA055791 PDT - Mechanisms and Strategies for Optimization

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(INCa_DGOS_1306) "Identification, characterization and clinical validation of new cellular and molecular targets in breast cancers of poor prognosis."

(INCa_DGOS_1307) Relevance of constitutional and somatic alterations of the ALK gene in neuroblastoma development
0.61 NCI (2011) R01CA148688 The ALK receptor tyrosine kinase as a therapeutic target in neuroblastoma
0.60 NCI (2010) None Companion Diagnostic for ALK Mutations
0.60 NCI (2009) R43CA139842 Discovery of inhibitors of ALK for the treatment of cancer
0.57 NCI (2009) R01CA140198 Targeting Oncogenic ALK Signaling in Neuroblastoma
0.57 NCRR (2011) M01RR000188 H-25893 ADVL0912, A PHASE 1/2 STUDY OF PF-02341066, AN ORAL SMALL MOLECULE
0.53 NCI (2009) R01CA096856 Novel role of STAT3 in NPM/ALK-induced oncogenesis
0.47 NCI (2009) R01CA136851 EML4-ALK: A Potential Therapeutic Target in Lung Cancer
0.43 NCI (2008) K08CA114395 Role of Jak3 in Anaplastic Large Cell Lymphoma

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(INCa_DGOS_1308) Non small cell lung cancer: differential analysis of biomarkers between primary tumor and metastasis
0.44 NCI (2011) R01CA108610 Peroxisome Proliferator-Activated Receptor (gamma) in Lung Cancer
0.44 NCI (2009) R21CA135532 Regulation of breast cancer progression by FAK expression in tumor macrophages
0.43 NIDCR (2009) RC1DE020332 Development and Profiling of Human-in-Mouse Models of Salivary Carcinomas
0.43 NCI (2009) R03CA141245 A primary human xenograft model of pancreatic cancer.
0.43 NCI (2008) U54CA119367 Biological Modification of Quantum Dots for in vivo Imaging
0.43 NCI (2008) R01CA109384 Discovery of Biomarkers for Lung Cancer Metastasis
0.42 NCI (2008) R21CA117117 Phase II Clinical Trial Utilizing Lithium for Patients with Neuroendocrine Tumors
0.42 NCI (2011) R01CA149669 CD73 and tumor immunity
0.41 NCI (2008) K01CA120881 The role of MEKK1-dependent gene expression in tumor progression
0.41 NCI (2009) R01CA130967 TWEAK-Fn14 Signaling in the Tumor Microenvironment
0.41 NCI (2011) 261201100112C-0-0-1 TAS::75 0849::TAS SBIR TOPIC 277 - PHASE I SNAPMAPTM: A FUNCTIONAL COMPANION DIA
0.41 NCI (2010) None Molecular mechanisms of host-derived CCL5 mediated mammary tumor growth
0.40 NCI (2008) R01CA108856 Role of myeloid immune suppressors in tumor angiogenesis
0.40 NIBIB (2008) R01EB009040 HIFU-enhanced tumor vaccines

0.40 NCI (2008) R01CA115484 CaP Metastasis Biomarkers: Validation/Genomics/Biology

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(INCa_DGOS_1312) Validation in patient that therapeutic efficacy of neo-adjuvant chemotherapy in localised breast cancer rely on anti-tumor immune response
0.48 NHLBI (2010) None Adoptive cell therapy for lymphoma: A study on the role of CD4 memory T cells in
0.48 NCI (2008) R01CA108856 Role of myeloid immune suppressors in tumor angiogenesis
0.48 NCI (2010) R01CA140614 Molecular and Cellular Characterization of Prognostic Immune Response in Childhoo
0.47 NCI (2008) P01CA109688 Immune Escape in Human Cancer: Mechanisms and Therapeutic Implications
0.46 NCI (2011) R01CA154656 Mechanistic Dynamic Study of Intranodal Chemokine-aided Antitumor Immune Priming
0.46 NIBIB (2008) R01EB009040 HIFU-enhanced tumor vaccines
0.46 NCI (2008) P30CA124435 PROG 7- Cancer Immunology and Immunotherapy
0.45 NCI (2009) R01CA130967 TWEAK-Fn14 Signaling in the Tumor Microenvironment
0.45 NCI (2009) F32CA136118 Control of Breast Cancer metastasis by Myeloid Immune Suppressor Cells
0.44 NCI (2009) R21CA135532 Regulation of breast cancer progression by FAK expression in tumor macrophages
0.44 NCI (2008) R21CA135221 Novel Strategies to Broaden the Impact of HIFU Therapy in Cancer Management
0.44 NCI (2011) R01CA161891 Immunomodulation of breast cancer via TLR7 agonist imiquimod and radiotherapy.
0.43 NCRR (2009) P41RR005959 IMMUNOTHERAPEUTIC POTENTIATION OF ANTI-TUMOR VACCINE WITH RFA WITH MRI
0.43 NCI (2009) U01CA141451 Collaborative Innate-Adaptive Immune Regulation of Tumor Progression
0.43 NCI (2011) ZIABC010892 Characterization of the interaction between inflammation and cancer progression
0.43 NCI (2008) R01CA117957 A mouse model of TGFbeta1 and tumor immunosurveillance in Squamous cell cancer
0.43 NCI (2008) R01CA113851 Local Radiation as an Adjuvant for Immunotherapy
0.43 NCI (2009) R01CA134622 Regulation of T cell Functions by the Breast Cancer Microenvironment
0.43 NCI (2008) R01CA106802 Anti-Tumor immunity in myeloma

(INCa_DGOS_1313) "A new approach for early detection, diagnosis, prognosis and follow up of hematological malignancies"

(INCa_DGOS_1315) Molecular signature of metastasis outcome in sarcomas
0.45 NCI (2008) U01CA114757 Diagnostic and Prognostic Sarcoma Signatures

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(INCa_DGOS_1321) Validation of an innovative molecular and cellular fingerprint strategy for the investigation of the peri-tumour area of gliomas.

(INCa_DGOS_1324) Diagnosis and prognosis of adrenocortical tumors : validation and transfer of new markers derived from genomic studies.

(INCa_DGOS_1332) Genetic determinism of colorectal cancer
0.54 NCI (2008) R01CA081488 Molecular Epidemiology of Colorectal Cancer
0.54 NCI (2008) K07CA120448 Genetic Testing and Cancer Screening in Hereditary Cancer Syndromes

0.53 NCI (2009) R01CA072851 Familial and Early Onset Colorectal Cancer
0.52 NCI (2010) R01CA134461 Genetic interactions in colorectal cancer susceptibility
0.52 NCI (2011) R15CA156601 Targeting the immunoproteasome as a novel colorectal cancer therapy
0.52 NCI (2010) None Genetic Association Studies in African American Colorectal Cancer Patients
0.51 NCI (2009) R01CA134759 Transposon-based screens for colorectal cancer genes
0.51 NCI (2008) R03CA130034 Familial Colorectal Cancer Registry in Puerto Rico: A Feasibility Study
0.50 NCI (2008) F32CA132493 Genetic Association Study in African-American Colorectal Cancer Patients
0.49 NCI (2009) R01CA059045 Genome-Wide Association Study of Nonsynonymous SNPs in Colon Cancer
0.48 NCI (2009) R01CA112230 Gene-Environmental Risk Assessment and CRC Screening
0.48 NCI (2010) None Epidemiologic Studies
0.47 NCI (2008) U01CA097427 Assessing the Impact of Colorectal Cancer Screening
0.46 NCI (2011) U01CA151920 Integrated Genomic Discovery and Functional Validation of Colorectal Cancer Loci
0.46 NCI (2008) R01CA126895 Whole Genome Scan for Modifier Genes in Colorectal Cancer
0.45 NCI (2008) P01CA081534 Clinical Research Core
0.45 NCI (2008) R43CA126154 Risk Based Colorectal Cancer Screening Education for Native Americans
0.45 NCI (2008) R01CA116467 Storytelling to Promote Colorectal Screening in Primary Care Clinics

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(INCa_DGOS_1339) "Design of a predictive algorithm to assess clinical response to anthracyclines in breast cancer, based on single nucleotide polymorphisms in genes encoding for immunological functions."

(INCa_DGOS_1345) Identification of subsets of patients with myeloid malignancies by the detection of defects in the new tumor suppressor gene TET2
0.42 OD (2009) RC1DA028422 Chemical modulators of Tet-family proteins

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(INCa_DGOS_1349) Alternative splicing and breast cancer
0.44 NIGMS (2009) R01GM049044 Mechanism of pre-mRNA splicing
0.43 NIGMS (2008) R21GM079413 Genomic Analysis of Alternative Splice-Site Selection
0.43 NIGMS (2009) R01GM070503 Molecular Recognition during pre-mRNA Splicing
0.42 NIGMS (2008) R01GM062287 Mechanisms of enhancer dependent splice-site activation
0.41 NIGMS (2008) R01GM057829 Protein RNA Rearrangements in the Spliceosome
0.41 NCI (2008) R01CA122573 Caffeine regulates splicing of cancer-related genes: dissecting the mechanism
0.41 NCI (2011) ZIABC011293 Impact of chromatin structure on alternative splicing of CD45 pre-mRNA

(INCa_DGOS_1355) Predictive biomarkers of reponse to AntiEGFR therapy in colorectal cancer

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(INCa_DGOS_1359) Molecular mechanisms determining response and relapse to anti-VEGF therapy in malignant gliomas

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(INCa_DGOS_1368) Targeting c-kit in mastocytosis and GIST

(INCa_DGOS_1376) Capture and characterization of Circulating Tumour Cells in breast cancer patients by a new microfluidic system
0.54 NCI (2010) None Automated Systems for Detection and Molecular Characterization of Circulating Tum

0.54 NCI (2011) R01CA139070 Detection of Carcinomas
0.53 NCI (2010) None 3D-Nanostrcutured Substrates for Detection of Circulating Tumor Cells
0.52 NIBIB (2010) None Point-of care Microfluidics for Early Detection of Cancer
0.51 NCI (2010) None High Sensitivity Detection and Isolation of Circulating Tumor Cells
0.51 NCI (2011) R33CA157396 Advanced Development of An Integrated CTC Enrichment Technology
0.50 NCI (2011) 261201100114C-0-0-1 TAS::75 0849::TAS "TOPIC 293, POINT OF CARE DEVICE FOR ANTIBODY INDEPENDENT ISOL
0.50 NCI (2009) R01CA141077 Circulating Tumor Cell Capture &Analysis in a Multi-Center Prostate Cancer Trial
0.49 NCI (2009) R44CA140047 Cancer Progeniyor Cell Markers
0.49 NCI (2011) R03CA162520 Bionanoconjugates for Detection of Circulating Tumor Cells in Lung Cancer
0.49 NCI (2009) R21CA139373 In vivo molecular laser detection and treatment of circulating cancer stem cells
0.48 NCI (2008) R01CA111359 High-speed reliable detection of cancer cells in blood
0.48 NCI (2008) R44CA122444 Multiplex Gene Expression in Single Cells for Circulating Tumor Cell Detection
0.48 NCI (2011) R21CA160052 Holistic diagnostics of host during development of cancer
0.47 NIBIB (2008) R01EB008047 Point-of-Care Microfluidics in Lung Cancer
0.47 NIBIB (2009) R01EB009230 Multifunctional nanotubes for in vivo detecting/purging circulating cancer cells
0.46 NCI (2010) None Targeted Therapy to Receptors for LH-RH in Prostate Cancer
0.45 NCI (2010) None Molecular Detection and Profiling of Circulating Tumor Cells
0.45 NCI (2010) None Immunonanoparticle Optical Sensor for CTC Detection

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(INCa_DGOS_1393) Triple-Negative Breast Carcinoma and Glucose Addiction - Identification of new metabolic markers towards a targeted therapeutic approach.
0.43 NCI (2009) R21CA133668 Stable isotopomer analysis of anabolic metabolic pathways in breast cancer
0.43 NCI (2009) R21CA135532 Regulation of breast cancer progression by FAK expression in tumor macrophages
0.42 NCI (2010) None Oncopigs as a better model for human cancer
0.42 NCI (2011) ZIABC010887 Novel Markers for Disease Outcome in Breast Cancer
0.41 OD (2010) None A novel biotherapeutic for triple-negative breast cancer.
0.41 NCI (2009) P50CA098131 p63/p73 Signaling Axis as a Target for Treatment of Triple-Negative Breast Cancer

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(INCa_DGOS_1415) Drug resistance and cellular heterogeneity in acute myeloid leukemia blasts
0.43 NCI (2011) R01CA086017 Molecular Characterization of Acute Myeloid Leukemia
0.41 NCI (2008) R21CA127848 MDR Gene Polymorphisms in AML

(INCa_DGOS_1429) Evaluation of dedicated antibodies to improve the diagnosis and the treatment of breast cancer bone metastases
0.63 NCI (2010) None Characterization of WWOX, the Cancer Gene Spanning FRA16D
0.58 NCI (2011) R01CA142115 Cannabinoid CB2 Agonists for Treatment of Breast Cancer-Induced Bone Pain
0.57 NCI (2009) R01CA132134 NF-kB Signaling in Osteoclastogenesis and Osteolytic Bone Metastasis
0.57 NCI (2010) R01CA142115 Cannabinoid CB2 Agonists for Treatment of Breast Cancer-Induced Bone Pain
0.56 NCCAM (2010) None Identification of Natural Product Inhibitors of Breast Cancer Bone Metastasis

0.56 NCI (2009) P50CA098131 Cellular Mechanisms of Bone Quality in Metastatic Breast Cancer
0.56 NCI (2009) P01CA094060 Mechanisms of Metastasis and Evasion of TGF-Beta Tumor Suppression Breast Cancer
0.53 NCI (2009) R01CA131188 Functions of BNIP3 in Mammary Tumorigenesis
0.53 NIDDK (2008) R01DK065837 PROSTATE CANCER BONE METASTASES: ROLE OF ADRENOMEDULLIN
0.53 NCI (2008) R01CA127380 Oncolytic Adenovirus-sTGFbetaRIIFc Targeting Breast Cancer Bone Metastasis
0.53 NCI (2008) K08CA118428 Molecular actions of tumor-derived endothelin-1 in the bone microenvironment
0.53 NCI (2010) None Development of Spectroscopic Biomarkers of Bone Quality in Metastatic Disease
0.52 NCI (2008) R01CA112403 The Role of SRC-1 in Breast Cancer
0.51 NCI (2010) None Development of recombinant rhTL1A protein for cancer treatment
0.51 NCI (2008) R01CA127735 A Role of Novel Serpin Maspinin Prostate Tumor/Bone Interaction
0.50 NCI (2011) R21CA157383 Mineralized 3-D tumor models to study breast cancer bone metastasis
0.50 NCI (2009) R21CA133597 Abi pathway in Breast Cancer Metastasis
0.50 NCI (2008) R43CA128176 Targeting Deceoy Receptor 3 in Breast Cancer

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(INCa_DGOS_1450) Evaluation and validation of the molecular karyotype-based predictive model in multiple myeloma

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(INCa_DGOS_1458) Production and characterization of CD19Zeta gene-modified EBV-specific CTLs for the European network CHILDHOPE

(INCa_DGOS_1461) Role of CXCL4L1 in Angiogenesis in Renal Cancer (ChemoRENCAN)