



LIRMM

Explorer des mentions d'interventions non médicamenteuses dans des données issues des médias sociaux

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SIRIC
MONTPELLIER CANCER
Site de Recherche Intégrée sur le Cancer

Intervention non-médicamenteuses (INM)

Exemples :

- Yoga
- Méditation
- Jeûne
- Programme nutritionnel
- **Cannabis**

...

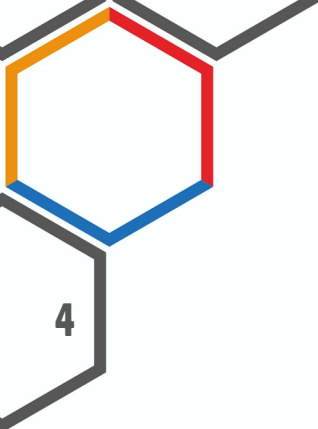
Médias sociaux (Reddit et Twitter)





CANCER DANS LE MONDE

En 2020 dans le monde :
≈ 10 millions de décès
≈ 1/6 décès
1^{ière} maladie responsable de décès



4



Dr. Allyson Ocean @drallysonocean · 17 août

Consider [#acupuncture](#) and [#CBD](#) or [#medicalmarijuana](#) to help with [#cancer](#)-related [#pain](#) [#PancChat](#)



PanCAN @PanCAN · 17 août

The disease itself may also cause uncomfortable symptoms, which are often diet-related. Many people find diet modifications, such as avoiding gas-forming foods, helpful. 🍏 (4/4) [#PancChat](#)
[twitter.com/letswinpc/stat...](#)



r/cancer · publiée par [u/cnut49](#) il y a 3 mois

7
↓

Any suggestions for CBD oil for a 62 yo male with stage 4 cancer?

Caregiver



My dad is fighting the good fight but is now in a clinical trial (colon cancer led to liver and lung cancer). He can do the gummies to amp his appetite but he doesn't want to feel high all day even if moderate. Are there any CBD oils out there you guys could recommend, with the primary goal of improving appetite and sleep? He's struggling to eat once or twice a day and struggles even more to sneak in an Ensure shake here and there, so we are looking for something he can take 2-3x a day without the high. the RSO looks promising but the THC is way high for him IMO. Thanks in advance.



4 Commentaires



Récompenser



Partager

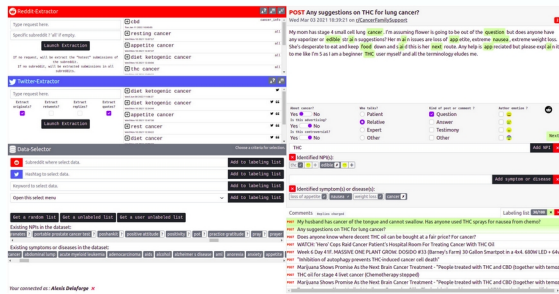


Sauvegarder



MÉTHODE

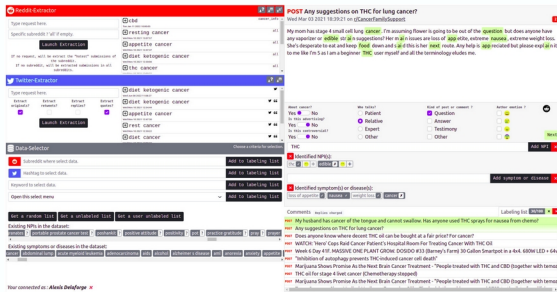
Labelliser



INMs
Symptômes
Locuteurs
Objectifs
Émotions
Commercial
Controverse

MÉTHODE

Labelliser



Entraîner

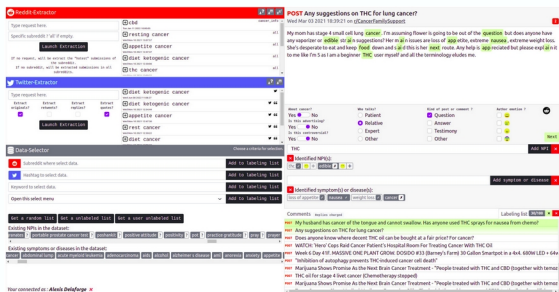
2 jeux de données :

- Annotateurs
- Règles métiers

INMs
Symptômes
Locuteurs
Objectifs
Émotions
Commercial
Controverse

MÉTHODE

Labelliser



Entraîner

2 jeux de données :

- Annotateurs
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INMs

Symptômes

Locuteurs

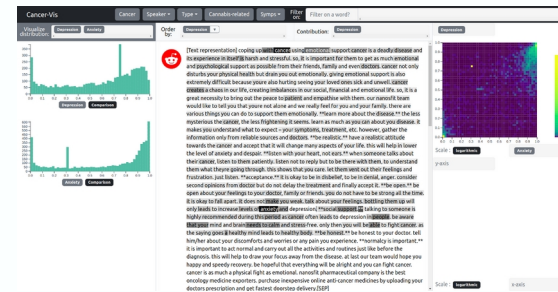
Objectifs

Émotions

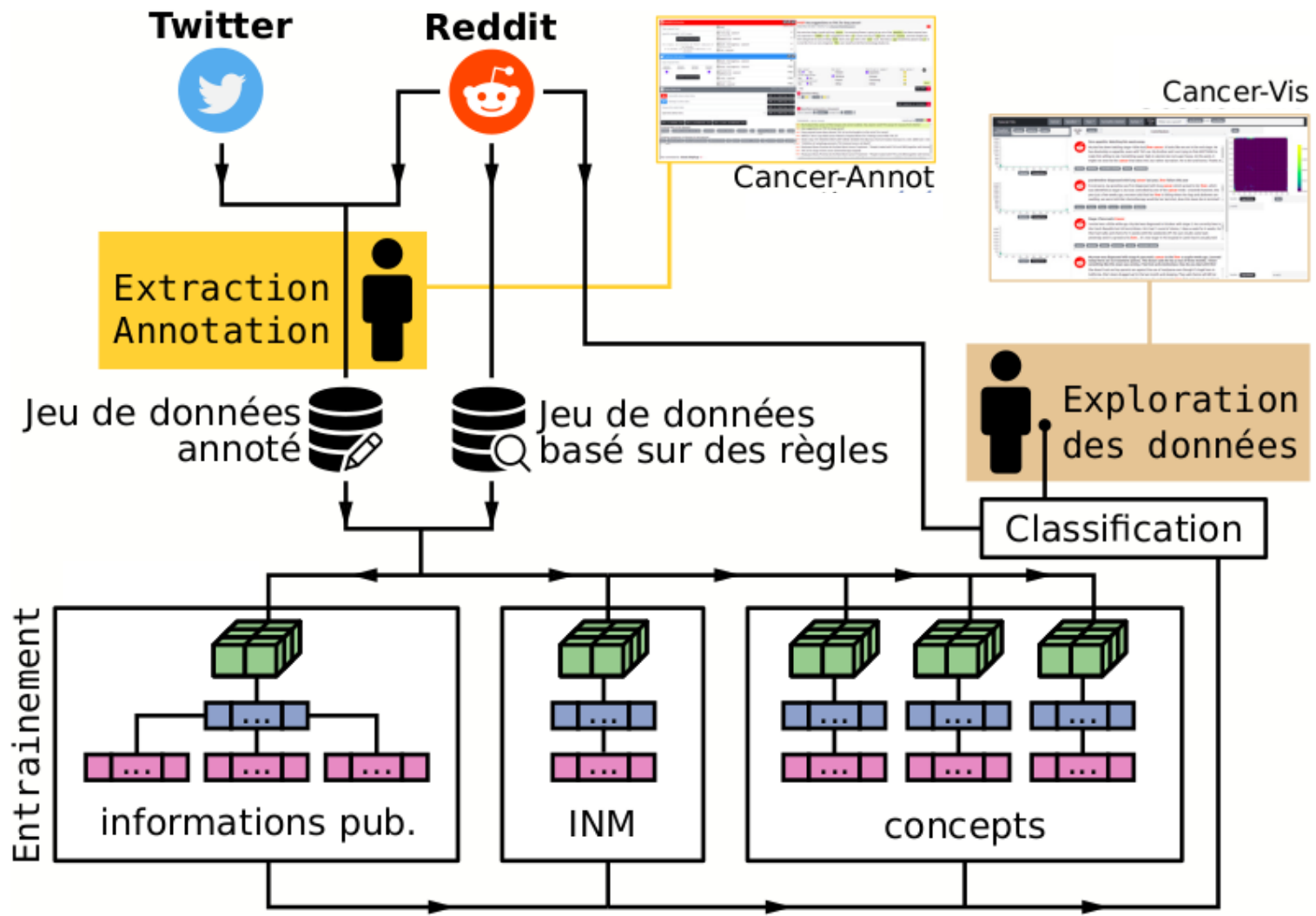
Commercial

Controverse

Explorer



Cannabis



OUTIL D'ANNOTATION DES DONNÉES

Cancer-Annot

The screenshot displays the Cancer-Annot web application interface, which is used for data extraction and annotation. The interface is divided into several sections:



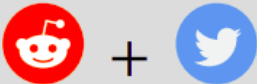
- Reddit-Extractor:** A section for extracting data from Reddit. It includes a search bar for "Type request here.", a dropdown for "Specific subreddit? 'all' if empty.", and a "Launch Extraction" button. Below this, there are instructions: "If no request, will be extract the 'hottest' submissions of the subreddit." and "If no subreddit, will be extracted submissions in all subreddits." A list of subreddits is shown, including "cbd", "resting cancer", "appetite cancer", "diet ketogenic cancer", and "thc cancer".
- Twitter-Extractor:** A section for extracting data from Twitter. It includes a search bar for "Type request here.", and four checkboxes for "Extract originals?", "Extract retweets?", "Extract replies?", and "Extract quotes?". A "Launch Extraction" button is present. A list of tweets is shown, including "diet ketogenic cancer", "rest cancer", and "diet cancer".
- Data-Selector:** A section for selecting data sources. It includes fields for "Subreddit where select data.", "Hashtag to select data.", "Keyword to select data.", and "Open this select menu". There are buttons for "Add to labeling list" and "Add to labeling list".
- Identified NPI(s):** A section for identifying Named Person or Place (NPI) entities. It shows "thc" and "edible" as identified NPIs.
- Identified symptom(s) or disease(s):** A section for identifying symptoms or diseases. It shows "loss of appetite", "nausea", "weight loss", and "cancer" as identified symptoms or diseases.
- Comments:** A section for viewing comments. It shows a list of comments related to the selected data, including "My husband has cancer of the tongue and cannot swallow. Has anyone used THC sprays for nausea from chemo?" and "Any suggestions on THC for lung cancer?".

At the bottom of the interface, there is a status bar that reads "Your connected as: Alexis Delaforge".

4 étudiants anglophones sur 170 heures

DONNÉES SUITE À L'ANNOTATION

10

	Données labellisées		Données non labellisées	
	Publications	Commentaires	Publications	Commentaires
	669	198	16 894	1.5m
	867			
	698	70	6 782	117
	768			
	1 635			

SUPPLÉMENTS

11

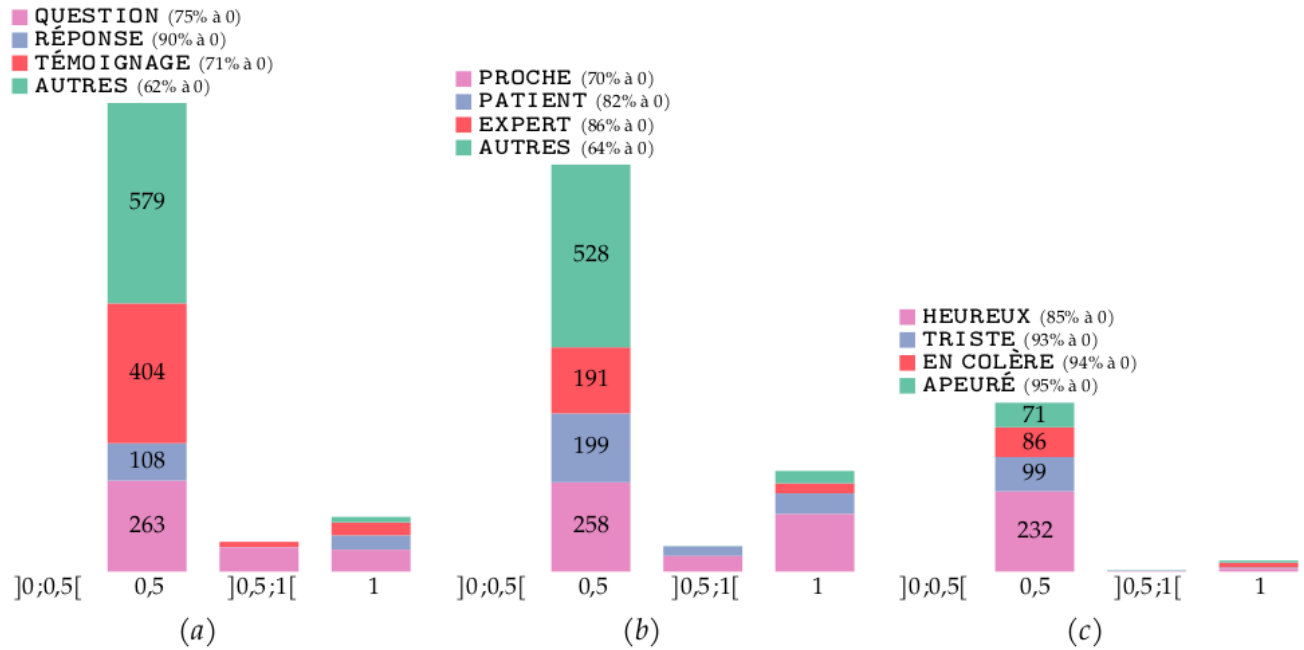


FIGURE 4.9 – Distribution des labels à plusieurs modalités. (a) type. On remarque que le type de publication est le label le plus renseigné. On observe également un grand nombre de témoignages selon les annotateurs, même si l'accord entre annotateurs est rare. (b) locuteur. On note que le locuteur est renseigné par les annotateurs, avec un consensus plus grand pour ce label aussi bien en proportion qu'en nombre, comparé aux autres labels à plusieurs modalités. (c) émotions. On observe que les émotions sont peu renseignées par les annotateurs. Finalement, sur les trois labels, les annotateurs n'ont pas été en accord lorsque l'un d'entre eux a renseigné un label. Ne figure pas, pour des problématiques de lisibilité la modalité 0. Il est important de lire ici que pour toutes les modalités de tous les labels, le score final est, le plus souvent, égal à zéro et donc qu'un consensus avait lieu sur la réponse "non" à la modalité du label en question. En d'autres termes, le consensus est très fréquent lorsqu'au moins un annotateur choisit le label à zéro, très peu fréquent lorsqu'au moins un annotateur choisit le label à 1.

catégorie		label		données annotées				scores classe vrai		
				manuellement		par règles				
				VRAI	FAUX	VRAI	FAUX	P	R	F1
RELATIF AU CANNABIS		531	645	3 761	3 761	0.36	0.52	0.42		
CANCER		1 205	40	29 279	34 929	0.97	0.99	0.98		
COMMERCIAL		158	1 076	6 957	67 132	0.0	0.0	0.0		
CONTROVERSE		154	1073	12 682	94 460	0.0	0.0	0.0		
LOCUT.	PATIENT	229	1 002	16 746	29 346	0.64	0.86	0.74		
	PROCHE	371	860	29 346	7 111	0.99	0.27	0.43		
	EXPERT	176	1 055	5 683	30 774	1.0	0.02	0.03		
TYPE	QUESTION	365	876	49 434	24 932	0.64	0.92	0.75		
	RÉPONSE	153	1 088	24 932	49 434	0.23	0.33	0.27		
	TÉMOIGNAGE	352	889	29 269	20 118	0.2	0.01	0.02		
SYMPTÔME (anglais)	PAIN	124	124	22 345	22 387	0.87	0.96	0.91		
	SICK	3	3	7 233	7 256	0.83	0.81	0.82		
	WEAK	4	4	3 398	3 418	0.68	0.87	0.76		
	DEPRESSION	16	17	6 014	6 030	0.80	0.89	0.84		
	LYMPHOMA	17	17	1 033	1 037	0.47	1.0	0.64		
	APPETITE	36	37	1 142	1 145	0.96	1.0	0.98		
	ANXIETY	44	44	9 469	9 481	0.91	0.91	0.91		
	VOMITING	13	13	849	853	0.06	1.0	0.11		
	PTSD	1	2	969	977	0.0	0.0	0.0		

■ Label conservé

Cancer-Vis

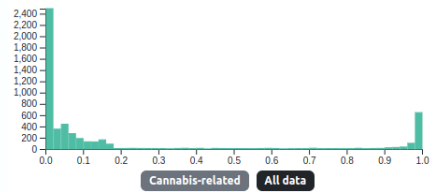
Cancer-Vis

Filter on:

Visualize distribution:

Order by:

Contribution:



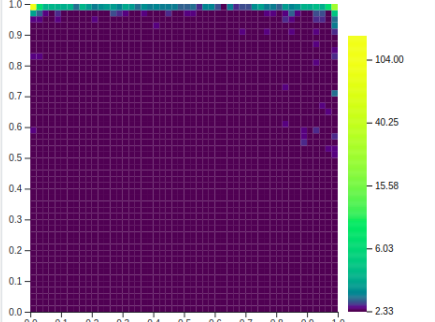
Can Marijuana cause cancer?
My dad and I would smoke together privately from time to time. They discovered cancer in his lungs and we don't know where it came from. It was probably all of 12 times in the last year, and a couple of those were pulls off of vapes. All were legal and regulated recreational uses. Is it possible this caused it?

Marinol - pure synthetic cannabis
Anyone have any experience taking Marinol and ingesting cannabis and boofing RSO? Gram has stage 4 cancer, don't want her to get too high and fall.

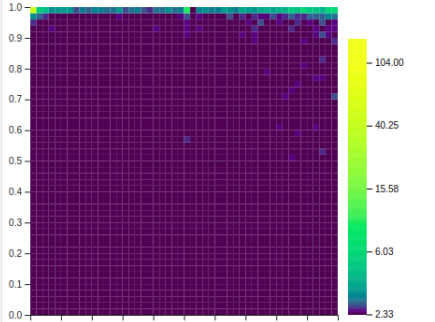
Clinical trial and weed ?
Mom has melanoma. Theyve been using a new drug to treat her which is keeping the cancer from spreading and allowing her to be alive. She has a lot of side effects from the drug, recently neuropathy, and medical marijuana would greatly improve her quality of life. She is apprehensive to ask her doctors for the stupid reason of the whole taboo around it but also because she claims that doctors say it will interfere with the

Does anyone have experience with CBD or THC products ?
Hi guys, My Dad has stage 4 Colon cancer and is experiencing pretty severe nausea and loss of appetite. He's currently taking on ondansetron 8 mg for nausea but isn't really helping. I'm pretty hesitate seeking outside products that aren't recommended by his oncologist since I'm not too familiar with the affects CBD or THC can have but curious as to if anyone in a similar situation has tried it and helped. Any advice is appreciated

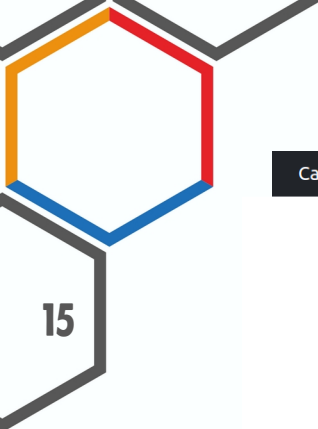
Risk of using marijuana when weight and blood pressure are low? [Stage 4 Pancreatic Cancer]
Dad [62] has Stage 4 mets pancreatic cancer with severe cachexia and having A LOT of trouble eating, only



Scale:



Scale:

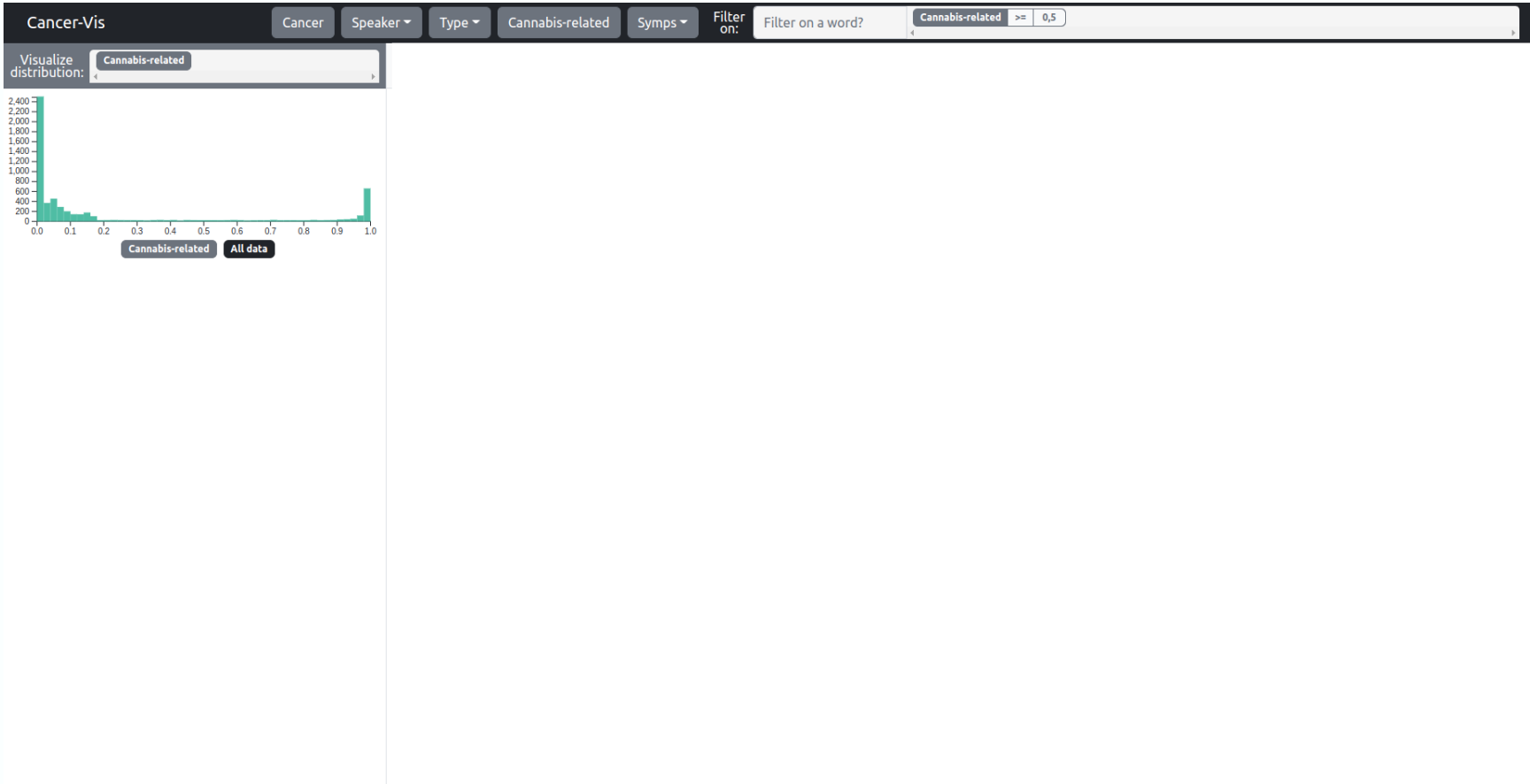


Cancer-Vis

Cancer Speaker ▾ Type ▾ Cannabis-related Symps ▾ Filter on:

Filter on a word? Cannabis-related >= 0,5





Order by:

Cancer ▾

Cannabis-related ▾

Contribution:

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Cancer Relative Question Cannabis-related Appetite Chemo Sick Testimony Tumour

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Cancer Tumour Question Cannabis-related Chemo Relative Anxiety Appetite Sick

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Cancer Question Cannabis-related Patient Depression Appetite Chemo

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Cancer Relative Cannabis-related Testimony Question Chemo Sick

**Risk of using marijuana when weight and blood pressure are low? [Stage 4 Pancreatic Cancer]**

Dad \[62\] has Stage 4 mets pancreatic cancer with severe cachexia and having A LOT of trouble eating, only

Cancer-Vis

Cancer

Speaker ▾

Type ▾

Cannabis-related

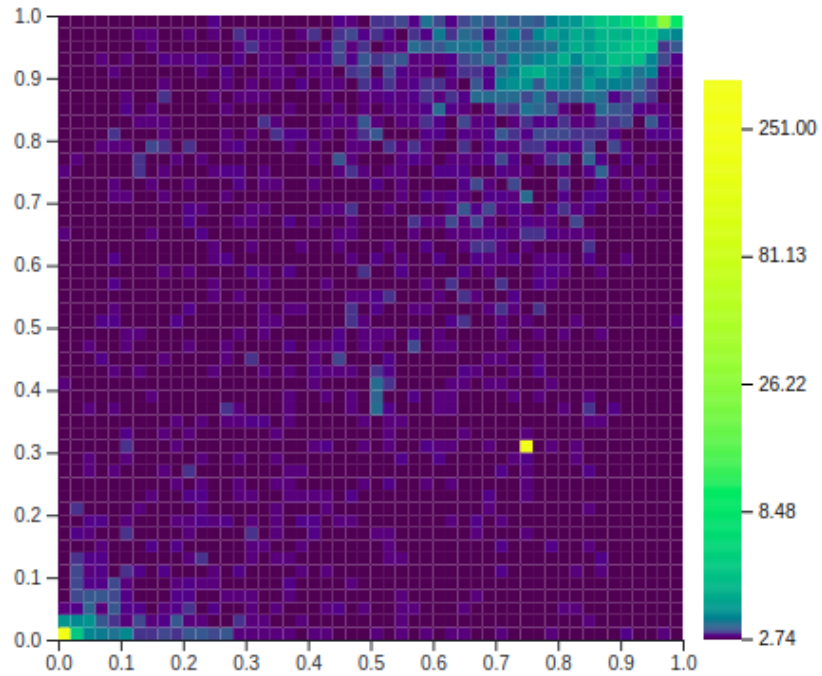
Symps ▾

Filter on:

Filter on a word?

Cannabis-related >= 0,5

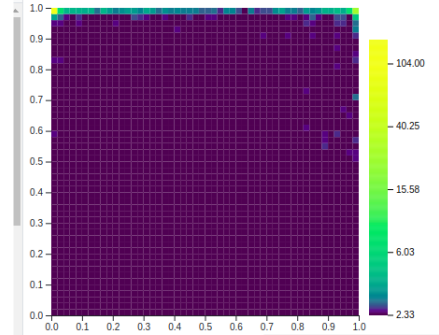
Anxiety



Scale: logarithmic

Depression

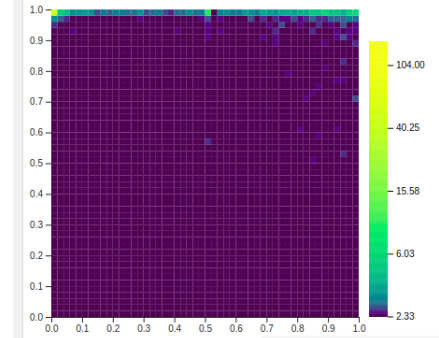
Cannabis-related



Scale: logarithmic

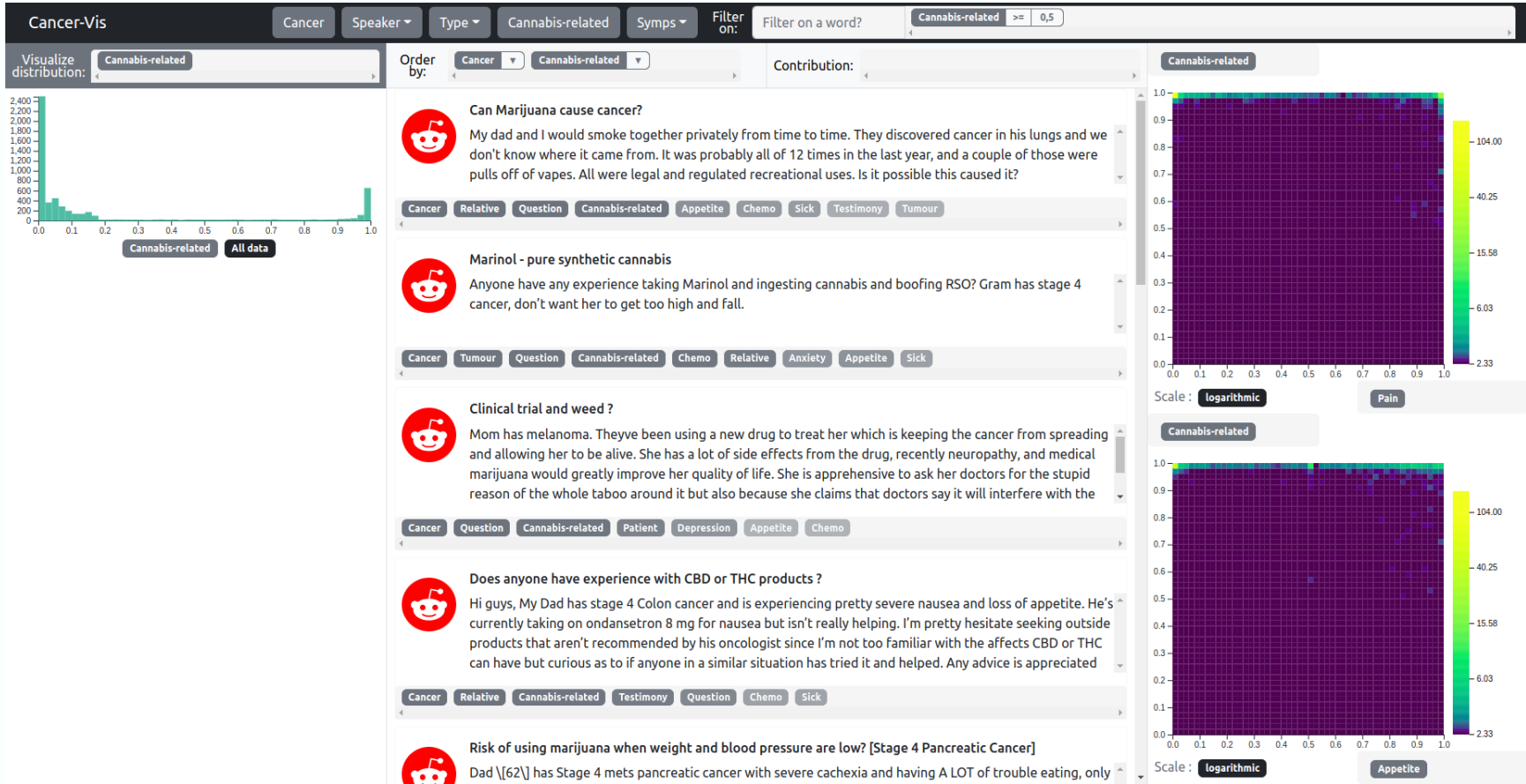
Pain

Cannabis-related



Scale: logarithmic

Appetite





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How much THC/CBD?

Hello. My mother has breast cancer with metastasizes in the bones. We are living in a country where medical marijuana is banned. I want to try parallel with chemotherapy to take THC and SBD extracts. Currently, she is 60kg, 69 years. After research found that the recommended SBD dosage for cancer patients per day is around 120-200mg. Can you tell what is the recommended dosage of THC per day or week?



Medical Marijuana

Have any of your family members tried marijuana? My dad has stage 3 lung cancer , and is having a really rough night. I got him some edibles, and he won't try it. I can't understand why! His doctor even OK'd it.



How to increase appetite?

My Aunt who has cancer is struggling to put on weight cause the drugs she's taking (Keytruda) is making her throw up. They took her off them for a couple weeks but shes back on it. I suggested to my cousin to do medical marijuana but my Aunt doesn't want to do it but I suggested to her to try the pill form or just get straight hash and bake them. Any other suggestions?

CAS D'ÉTUDE SUR LES DÉRIVÉS DU CANNABIS



Risk of using marijuana when weight and blood pressure are low? [Stage 4 Pancreatic Cancer]

Dad \[62\] has Stage 4 mets pancreatic cancer with severe cachexia and having A LOT of trouble eating, only have a few hundred calories the last few days. I want him to try vaping some marijuana for appetite stimulation but I am worried he is too weak and that could affect things. Or is there not really a risk at this point? Should I make sure he eats something small first? I just feel like very helpless re: getting him to eat

Cancer

Weak

Question

Relative

Cannabis-related

Tumour

Chemo

Appetite

Anxiety

Sick



bloodshack · il y a 4 a

Hodgkin's Lymphoma

Speak with your doctor first, I think.

↑ 3 ↓ Répondre Partager ...



bubblebeard1678 · il y a 4 a

I am a huge proponent for medical marijuana, that being said I still think you should at least bring it up with the doctor. If your father is not used to THC this is really gonna mess him up, and possibly caused him a little bit of panic. It really does help me with my pain and my appetite but I don't feel comfortable saying yes if hes not doing well. Anecdotally I can say that I don't think it would really hurt him but at the same time I don't know that you want him freaking out or throwing up. Also oral thc may be better than vaping because he may start coughing

↑ 1 ↓ Répondre Partager ...



Moto-Warboy · il y a 4 a

Stage IV Colon Cancer

You could try putting CBD oil under his tongue. Probably the least invasive method of using marijuana.

↑ 1 ↓ Répondre Partager ...



sfgarage12342423 OP · il y a 4 a



bros402 · il y a 4 a

31/M dx May 2015 Chronic NK&T-LGGL, Taken MTX, CTX. In a Trial

Talk to his doctor - I used marijuana with a low BMI & low blood pressure and I was fine, but if he has not been eating much at all - you might need to talk to a nutritionist to get a diet plan so he doesn't eat too much

and make sure that he starts with ONE HIT, give him 5-10 minutes after the hit, ask him how he feels, and if he doesn't feel anything, have him do another, and so on. Make sure to tell him that he might not feel high at first, but if he feels a little bit of something, that is enough

↑ 1 ↓ Répondre Partager ...

CAS D'ÉTUDE SUR LA DOULEUR ET L'ADMINISTRATION

23

		REL. CANNABIS ≥ 0.8				p-value
				PAIN ≥ 0.8		
		n	freq.	n	freq.	
Termes	RSO, Simpson	33	0.04	8	0.03	0.26
	CBD, Cannabidiol	113	0.13	46	0.16	0.07
	THC	117	0.13	45	0.15	0.20
	Delta 8, D8	1	0.00	0	0.00	0.48
	Cannabis	278	0.32	48	0.16	7×10^{-12}
	Marijuana	275	0.31	79	0.27	0.05
	Weed	90	0.10	39	0.13	0.03
Mode d'administration						
Union des Termes (UdT)		696	0.79	192	0.66	2×10^{-12}
Edibles + UdT		38	0.04	19	0.07	0.03
Smoke + UdT		105	0.12	59	0.20	1×10^{-7}
Gummy + UdT		10	0.01	9	0.03	1×10^{-4}
Suppositories + UdT		3	0.00	1	0.00	0.99
Oil + UdT		116	0.13	28	0.10	0.02
Total		867		292		



LIMITES CANCER-VIS

24

Efficacité des réseaux entraînés:

- Manque de données
- Annotation manuelle libre

INMs utilisées :

- Dérivés du cannabis



CONCLUSION CANCER-VIS

25

Outil d'analyse des mentions d'INMs sur les réseaux sociaux dans le cadre du cancer



PERSPECTIVES COURT TERME POUR CANCER-VIS

26

Cancer-Vis :

- Métrique quantitative
- Autres sujets et concepts
- Espace de représentation



PERSPECTIVES DONNÉES MÉDIAS SOCIAUX

27

- Veille concurrentielle ou veille marketing
- Détection infos médicales
- Évolution temporelle des informations



PERSPECTIVES DONNÉES MÉDIAS SOCIAUX

28

- Veille concurrentielle ou veille marketing
- **Détection infos médicales**
- Évolution temporelle des informations



PERSPECTIVES DONNÉES MÉDIAS SOCIAUX

29

- Veille concurrentielle ou veille marketing
- Détection infos médicales
- Évolution temporelle des informations

- Analyse spécifique des dérivés du cannabis :
 - Publications scientifiques
 - Retours de patients sur les médias sociaux



LIRMM



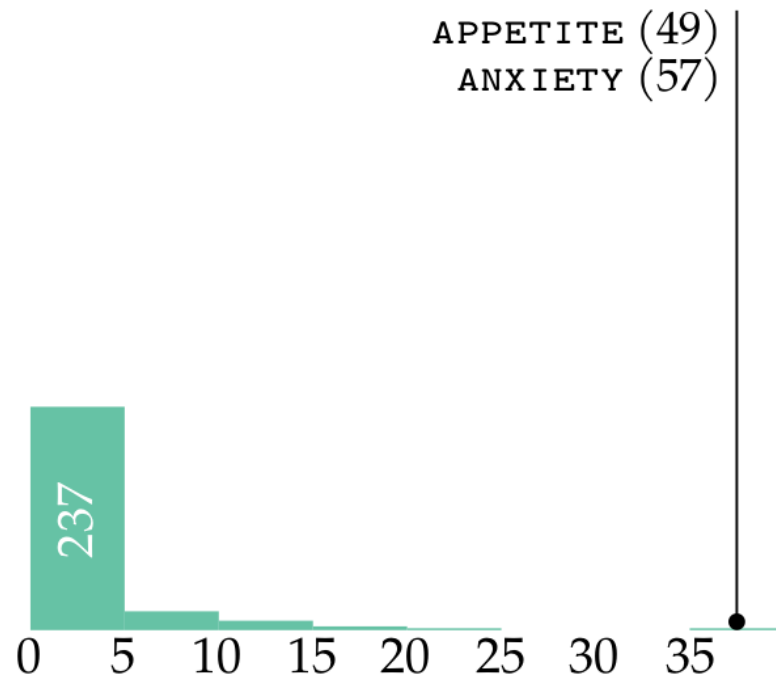
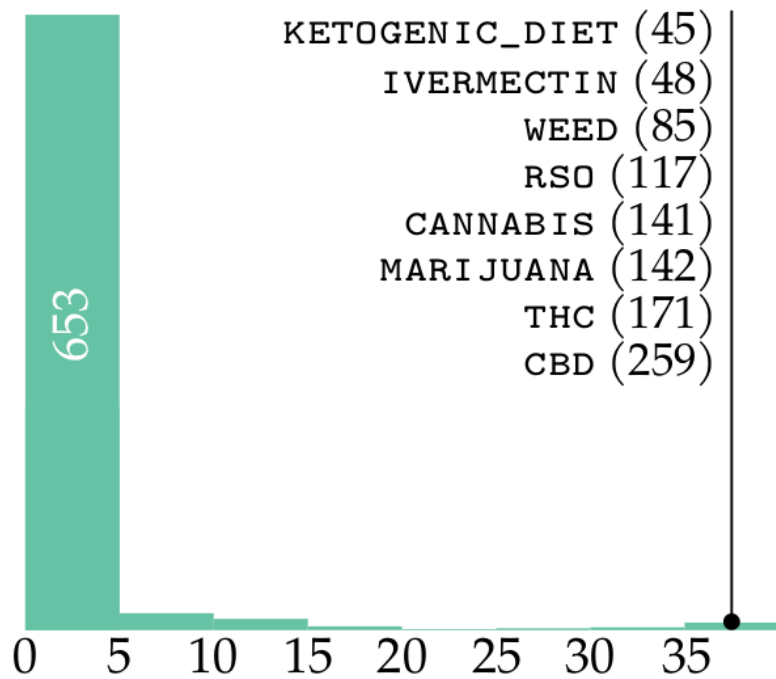
MERCI !



SIRIC
MONTPELLIER CANCER
Site de Recherche Intégrée sur le Cancer

SUPPLÉMENTS

32



SUPPLÉMENTS

33

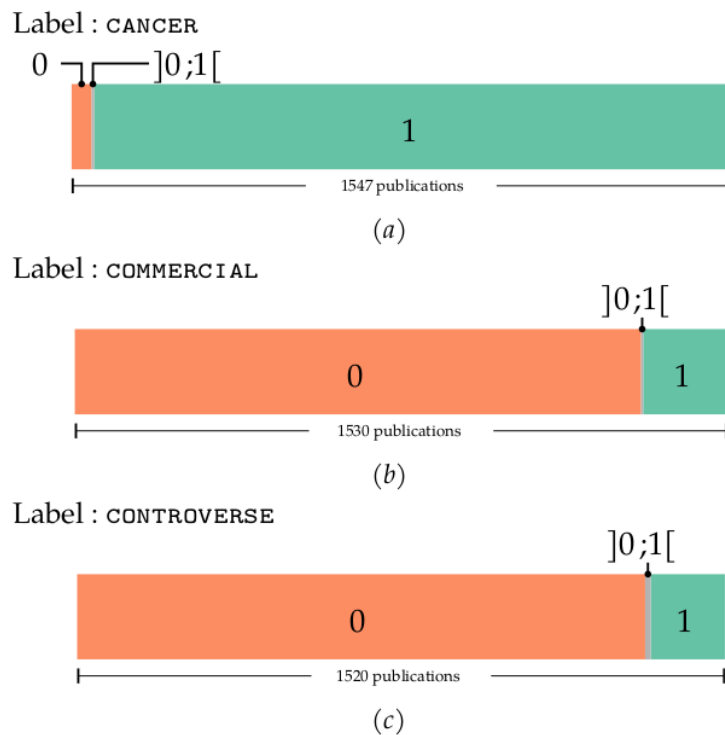


FIGURE 4.8 – Distribution des scores des publications pour les labels dichotomiques. (a) cancer. (b) commercial. (c) controverse. On observe l'accord presque systématique, sur les trois labels, entre annotateurs, car le score des publications annotées est, le plus souvent, égal à 0 (en orange) ou 1 (en vert). Cela signifie que tous les annotateurs ont fait le même choix et que la moyenne des choix est donc égale à 0 ou 1. Un score entre 0 et 1 exclus montre un désaccord entre les annotateurs (en gris).

SUPPLÉMENTS

34

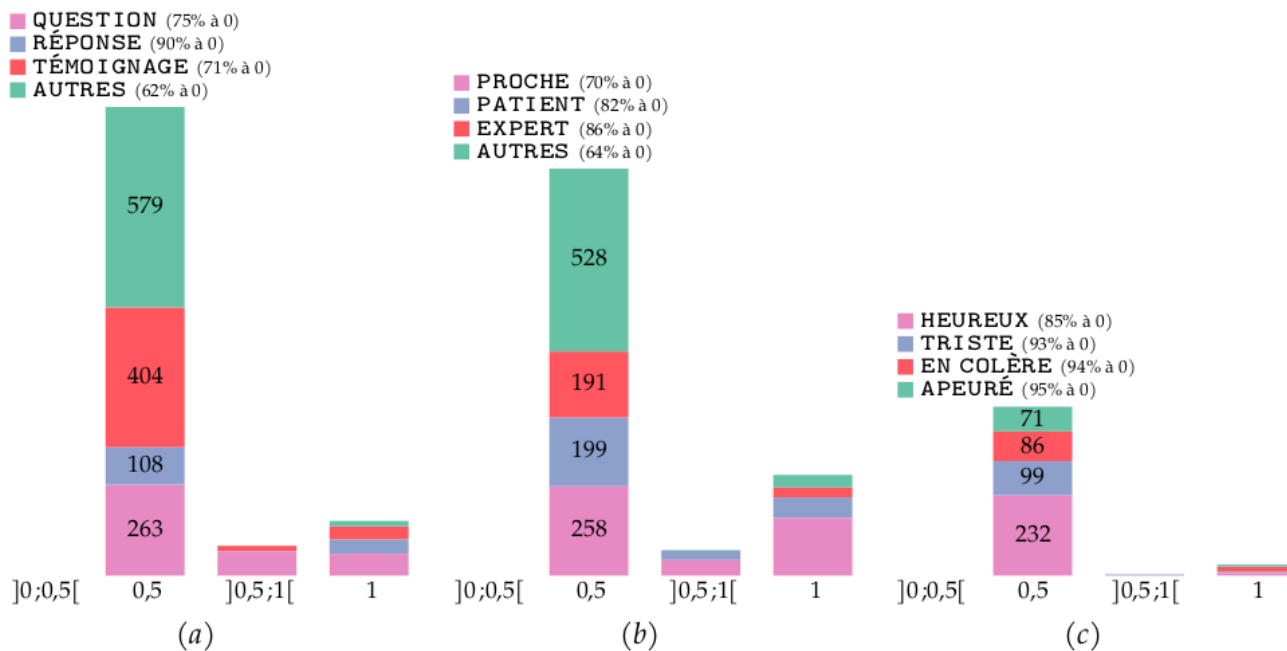


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SUPPLÉMENTS

35

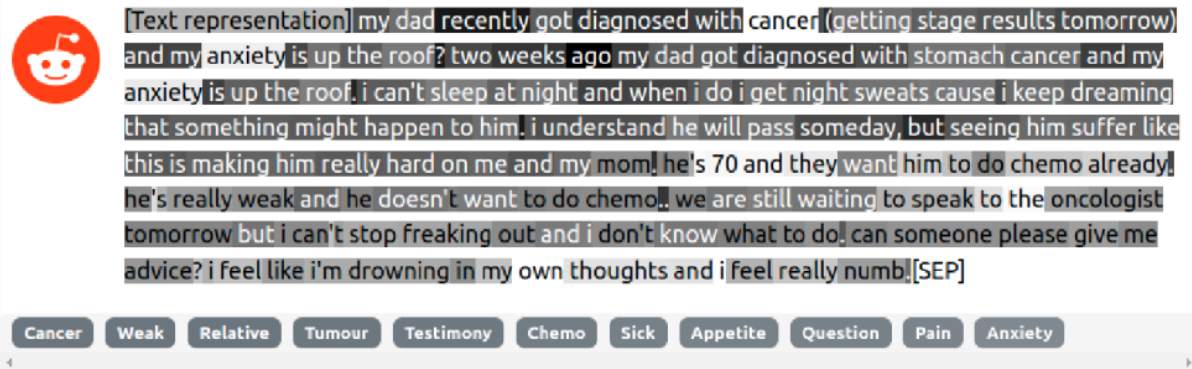
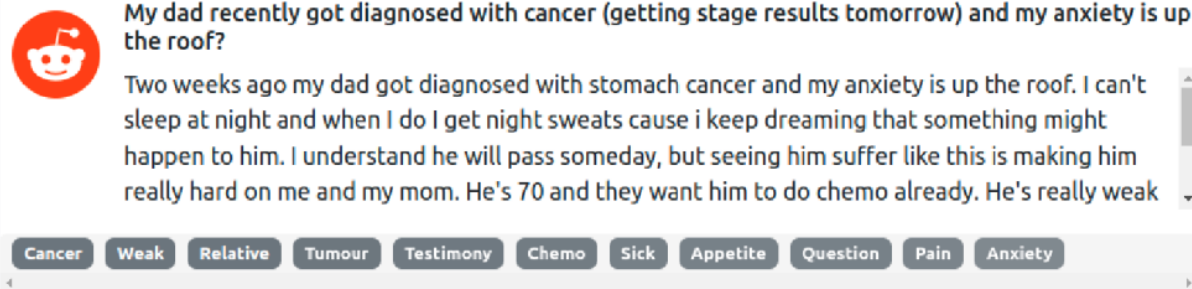


FIGURE 4.12 – Affichage des textes dans l'outil Cancer-Vis. (a) Texte sans score d'attention. (b) Texte avec le score d'attention au survol du token de représentation du texte pour la classifieur anxiety.

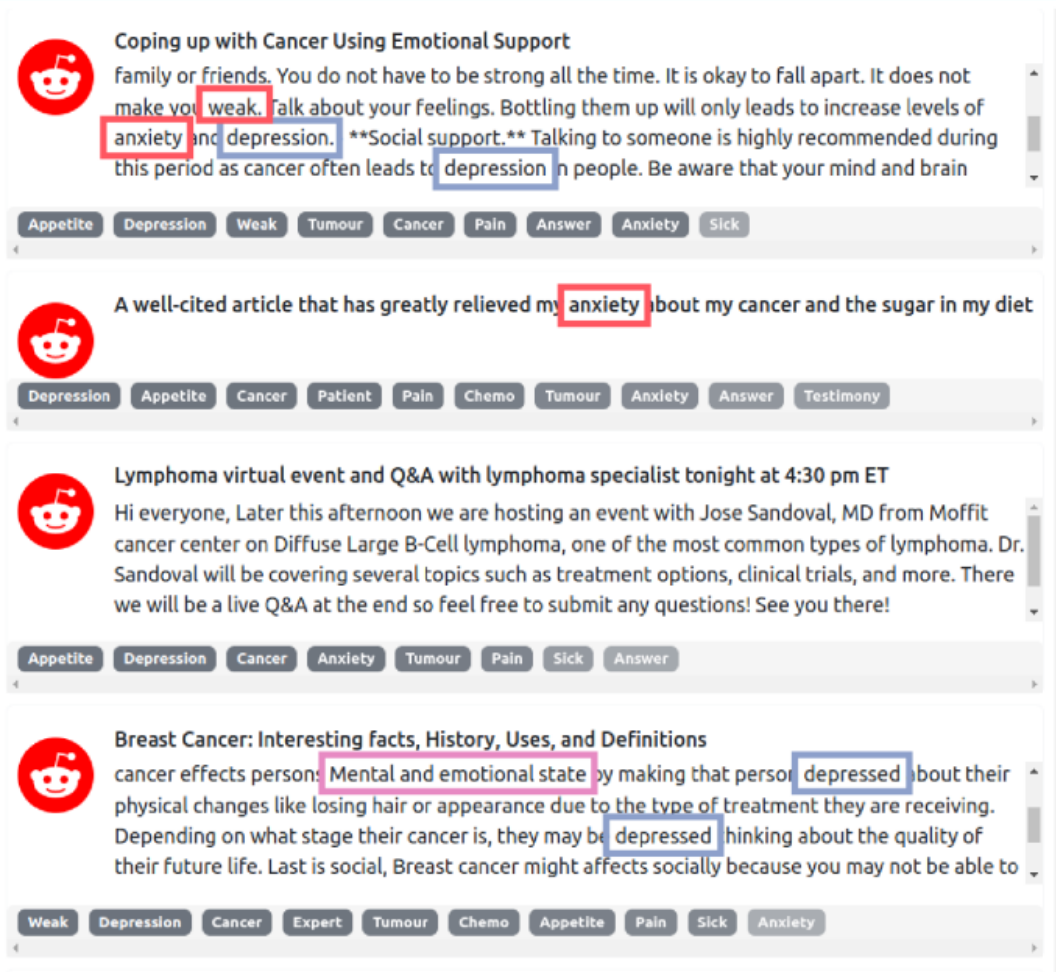


FIGURE 4.16 – Textes concernant le label depression. On observe, ici, dans les encadrés bleus, les mentions explicites de la dépression, dans les encadrés roses les termes implicites de la dépression et dans les encadrés rouges les mentions explicites d’autres symptômes. On constate que le label anxiety pour lequel nous avons entraîné un classifieur apparaît deux fois dans ces textes.