**Evaluation Instruction:**

There are 22 topics generated based on this dataset. The number of topics, 22, is determined by topic coherence measure. Each topic is represented with top 20 tokens. The word with a star mark is a MeSH descriptor, following with its MeSH url.

Among these 22 topics, 9 topics have 0 MeSH descriptor appear in their top 20 terms, 6 topics have only 1 MeSH descriptor in their top 20 terms, and 7 topics have multiple MeSH descriptors in their top 20 terms. I have put them into different pdf files with names: 'topics_top20_0', 'topics_top20_1', and 'topics_top20_n'.
For each topic, I also listed five most relevant citations PubMed link and a weight of this topic in this doc. Below is an example.

'#4: mri image iugr brain fetal magnetic resonance *magnetic_resonance_imaging cerebral autopsy ventriculomegaly imaging system study change *prenatal_diagnosis development *brain abnormality intrauterine
http://www.ncbi.nlm.nih.gov/pubmed/?term=22430716 0.991
http://www.ncbi.nlm.nih.gov/pubmed/?term=19301351 0.866
http://www.ncbi.nlm.nih.gov/pubmed/?term=19156685 0.708
http://www.ncbi.nlm.nih.gov/pubmed/?term=20661883 0.631
http://www.ncbi.nlm.nih.gov/pubmed/?term=23401108 0.572'

The evaluation could be divided into three parts.

**Part 1, evaluation on the topics with 0 MeSH descriptor.**
1, For each topic, please go though the top 20 words and its 5 relevant PubMed citations. Then mark a level of meaningful for this topic. 3 is very meaningful, 1 is not meaningful at all, 2 is just meaningful in part.
2, For each topic, please assign a relevant MeSH descriptor that could be used to describe this topic. This MeSH descriptor can be find from its 5 relevant PubMed citations or from your brain. If no such MeSH descriptor, please write down 'N/A' and try to come up a label for this topic

Here is one example:
'#1: lung fetal cdh congenital diaphragmatic hernia fetuse study result survival pulmonary liver objective patient surgery conclusion control case atrial associate
http://www.ncbi.nlm.nih.gov/pubmed/?term=20509150 0.996
http://www.ncbi.nlm.nih.gov/pubmed/?term=21671461 0.996
http://www.ncbi.nlm.nih.gov/pubmed/?term=19365875 0.995
http://www.ncbi.nlm.nih.gov/pubmed/?term=18551724 0.958
http://www.ncbi.nlm.nih.gov/pubmed/?term=22052745 0.947
'
You can just write down:
#1: 3, N/A, 'cdh study'

**Part 2, evaluation on the topics with 1 MeSH descriptor.**
1, For each topic, please go though the top 20 words and its 5 relevant PubMed citations. Then mark a level of meaningful for this topic. 3 is very meaningful, 1 is not meaningful at all, 2 is just meaningful in part.
2, Please indicate whether the only MeSH descriptor in each topic can be used to describe this topic. 3 is that this MeSH descriptor can be used to describe this topic totally, 1 is that this MeSH descriptor can't be used to describe this topic at all, and 2 is this MeSH descriptor can be used to describe this topic in part.

Here is one example:
'#10: woman prenatal result testing study test pregnancy screening method objective decision conclusion invasive information termination patient diagnosis *prenatal_diagnosis(https:// meshb.nlm.nih.gov/#/record/ui?ui=D011296) attitude anxiety
http://www.ncbi.nlm.nih.gov/pubmed/?term=16845682 0.996
http://www.ncbi.nlm.nih.gov/pubmed/?term=23447385 0.996
http://www.ncbi.nlm.nih.gov/pubmed/?term=18509872 0.996
http://www.ncbi.nlm.nih.gov/pubmed/?term=24578289 0.996
http://www.ncbi.nlm.nih.gov/pubmed/?term=17600863 0.996
'

You can write down:
#10: 3, 3

**Part 3, evaluation on the topics with multiple MeSH descriptor.**
1, For each topic, please go though the top 20 words and its 5 relevant PubMed citations. Then mark a level of meaningful for this topic. 3 is very meaningful, 1 is not meaningful at all, 2 is just meaningful in part.

2, If these MeSH descriptors are close to each other in meaning, please label this topic as a single concept topic. If these MeSH descriptors are quite different from each other, please label this topic as an aggregate concepts topic and try to be specific about which domains this topic landed on.

Here is one example:
#5: 'twin pregnancy monochorionic ttt transfusion syndrome laser dichorionic *fetofetal_transfusion(https://meshb.nlm.nih.gov/#/record/ui?ui=D005330) *twins(https:// meshb.nlm.nih.gov/#/record/ui?ui=D014427) mc one placental *twins,_monozygotic(https:// meshb.nlm.nih.gov/#/record/ui?ui=D014430) recipient anastomosis discordant selective study mca
http://www.ncbi.nlm.nih.gov/pubmed/?term=22418955 0.996
http://www.ncbi.nlm.nih.gov/pubmed/?term=16170838 0.995
http://www.ncbi.nlm.nih.gov/pubmed/?term=17186565 0.907
http://www.ncbi.nlm.nih.gov/pubmed/?term=23744723 0.843
http://www.ncbi.nlm.nih.gov/pubmed/?term=20087909 0.795
'

You can write down:

#5: 3, aggregate concepts topic, it is about twin and transfusion