Literature Searching in PubMed: Advanced Course

Exercise 2:

Question:
Does the additional intake of spironolactone reduce mortality in patients with heart failure?

Task – Create a suitable search:
1. Identify the PICO aspects of the question and consider what you are looking for.
2. Find suitable MeSH terms in the MeSH database
3. Find suitable text words (note synonyms and word variants)
4. Combine the MeSH terms and text words with OR and then the partial searches of the different PICO aspects with AND

Bonus task:
Filter your results from 4. with the RCT filter from Cochrane (https://work.cochrane.org/pubmed)

Possible solutions as of 18. October 2024:

1.-4.   (heart failure[tiab] OR cardiac failure[tiab] OR myocardial failure[tiab] OR heart decompensation[tiab] OR heart failure[mesh])

AND

(spironolactone[tiab] OR aldactone[tiab] OR spironolactone[mesh])

AND

(death*[tiab] OR dead*[tiab] OR die[tiab] OR died[tiab] OR dying[tiab] OR mortal*[tiab] OR fatal*[tiab] OR surviv*[tiab] OR mortality[mesh])

==> 947 hits

Bonus task:

(heart failure[tiab] OR cardiac failure[tiab] OR myocardial failure[tiab] OR heart decompensation[tiab] OR heart failure[mesh])

AND

(spironolactone[tiab] OR aldactone[tiab] OR spironolactone[mesh])

AND

(death*[tiab] OR dead*[tiab] OR die[tiab] OR died[tiab] OR dying[tiab] OR mortal*[tiab] OR fatal*[tiab] OR surviv*[tiab] OR mortality[mesh])

AND

(randomized controlled trial[pt] OR controlled clinical trial[pt] OR randomized[tiab] OR placebo[tiab] OR clinical trials as topic[mesh:noexp] OR randomly[tiab] OR trial[ti] NOT (animals[mesh] NOT humans[mesh]))

==> 440 hits