**Appendix 2**

Database: Embase Classic+Embase <1947 to 2020 February 12>, Ovid MEDLINE(R) ALL <1946 to February 12, 2020>, EBM Reviews - Cochrane Central Register of Controlled Trials <January 2020>

1 Valproic Acid/ (75857)

2 Valproic Acid.tw,kw. (21704)

3 (Divalproex or Depakene or Valproate or dipropylacetic acid).tw,kw. (28680)

4 or/1-3 (87205)

5 exp Headache Disorders/ (348092)

6 Headache/ (249179)

7 (headache\* or migraine\*).tw. (283911)

8 5 or 6 or 7 (467643)

9 4 and 8 (7626)

10 exp Emergency Service, Hospital/ (82030)

11 Emergency Medicine/ (53484)

12 (emergenc\* adj3 (department\* or room\* or service\* or medicine or treatment)).tw. (361534)

13 (emergenc\* and (department\* or room\* or service\* or medicine or treatment)).kf. (12362)

14 Acute Disease/ or acute treatment.tw,kw. (345091)

15 exp Administration, Intravenous/ (548138)

16 (Intravenous or iv).ti. (299668)

17 10 or 11 or 12 or 13 or 14 or 15 or 16 (1509213)

18 9 and 17 (645)

19 (acute adj5 (heachache\* or migraine\*)).tw. (8229)

20 (acute headache\* or acute migraine\*).kw. (167)

21 19 or 20 (8283)

22 4 and 21 (373)

23 18 or 22 (823)

24 exp animals/ not humans/ (17789346)

25 23 not 24 (574)

26 (exp infant/ or exp child/ or child\*.ti. or p?ediatric\*.ti.) not exp adults/ (4264117)

27 25 not 26 (495)

28 27 use medall (113)

29 27 use cctr (52)

30 \*valproic acid/ (25514)

31 Valproic Acid.tw. (21094)

32 (Divalproex or Depakene or Valproate or dipropylacetic acid).tw. (28340)

33 30 or 31 or 32 (51698)

34 exp "headache and facial pain"/ (311146)

35 (headache\* or migraine\*).tw. (283911)

36 34 or 35 (454622)

37 33 and 36 (3192)

38 emergency ward/ (207654)

39 emergency health service/ (139857)

40 (emergenc\* adj3 (department\* or room\* or service\* or medicine or treatment)).tw. (361534)

41 acute disease/ (323600)

42 acute treatment.tw. (22104)

43 emergency treatment/ (28142)

44 intravenous drug administration/ (388064)

45 (intravenous or iv).ti. (299668)

46 or/38-45 (1492383)

47 37 and 46 (359)

48 (acute adj5 (heachache\* or migraine\*)).tw. (8229)

49 33 and 48 (240)

50 47 or 49 (469)

51 exp animals/ not exp humans/ (10046139)

52 (child/ or exp infant/ or child\*.ti. or p?ediatric\*.ti.) not exp adult/ (4068751)

53 50 not (51 or 52) (400)

54 53 use emczd (244)

55 28 or 29 or 54 (409)

56 remove duplicates from 55 (292)

57 56 use medall (111)

58 56 use emczd (157)

59 56 use cctr (24)