

Table S1 Embase search strategy

No.	Query	Results
#1	((vibrat* OR vibrant*) NEAR/6 (capsule* OR microcapsule*)) OR 'vibravot' OR ('vibration'/syn AND (capsule* OR microcapsule*))	367
#2	constipat* OR obstipat* OR defecat* OR dyschezia* OR 'colonic inertia*' OR 'bowel movement*' OR 'bowel function*' OR 'defecation'/syn OR 'constipation'/syn	154,046
#3	#1 AND #2	18
#4	#3 NOT ([animals]/lim NOT [humans]/lim) NOT ('conference review'/it OR 'editorial'/it OR 'letter'/it OR 'note'/it OR 'review'/it OR 'short survey'/it OR 'tombstone'/it OR 'case report'/de OR 'meta analysis'/de OR 'meta analysis topic'/de OR 'systematic review'/de OR 'systematic review topic'/de)	15

Table S2 PubMed search strategy

No.	Query	Results
1	((Vibrat* or vibrant*) adj7 (capsule* or microcapsule*)) or "vibravot").mp. or (exp vibration/and (capsule* or microcapsule*).mp.) [mp = title, book title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms, population supplementary concept word, anatomy supplementary concept word]	95
2	(Constipat* or obstipat* or defecat* or Dyschezia* or colonic-inertia*).mp. or exp constipation/or exp defecation/[mp = title, book title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms, population supplementary concept word, anatomy supplementary concept word]	46,388
3	1 and 2	8
4	3 not (exp "animals"/not exp "humans"/) not ("case reports" or "comment" or "editorial" or "guideline" or "introductory journal article" or "meta analysis" or "news" or "retracted publication" or "review" or "systematic review").pt.	7

Table S3 Cochrane Central search strategy

No.	Query	Results
#1	((vibrat* OR vibrant*) NEAR/6 (capsule* OR microcapsule*)) OR 'vibravot' OR ([mh "vibration"] AND (capsule* OR microcapsule*))	26
#2	constipat* OR obstipat* OR defecat* OR dyschezia* OR 'colonic inertia*' OR 'bowel movement*' OR 'bowel function*' OR [mh "defecation"] OR [mh "constipation"]	24,832
#3	#1 AND #2	20
#4	#3 in trials	20

Table S4 Web of Science search strategy

No.	Query	Results
1	(Vibrat* OR vibrant*) NEAR/6 (capsule* OR microcapsule*) OR "vibravot" (Topic) and Constipat* OR obstipat* OR defecat* OR Dyschezia* OR colonic-inertia* OR bowel-movement* OR bowel-function* (Topic) and Editorial Material (Exclude—Document Types)	14

Table S5 Global Index Medicus search strategy

No.	Query	Results
1	tw:((tw:(constipat* OR obstipat* OR defecat* OR dyschezia* OR “colonic inertia” OR “bowel movement” OR “bowel function”)) AND (tw:(“vibrating capsule”) OR “vibravot” OR “vibrant gastro”)))	1

Table S6 Google Scholar search strategy

Parameters	Query [†]	Results
All years, citation only records included, patent records excluded	Constipat* obstipat* defecat* Dyschezia* “colonic inertia” “bowel movement” “bowel function” “vibrating capsule”	60

[†], the | symbol designates OR, a space designates AND. Searched via Harzing AW [2007], Publish or Perish, available online: <https://harzing.com/resources/publish-or-perish>.

Table S7 Cochrane risk of bias tool for illustration of quality of RCTs

Study	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)
Rao1, 2019	Low	Low	Low	Low	Low	Low
Rao2, 2019	Low	Low	Low	Low	Low	Low
Rao, 2023	Low	Low	Low	Low	Low	Low
Zhu, 2022	Low	Low	Low	Low	Low	Low

RCT, randomized controlled trial.