Appendix 1. Complete list of key words used to search the most relevant databases for the studies to be included in the present review.

Minimally invasive dentistry caries		
Dental Caries/therapy*	AND	Ultrasonic Therapy/instrumentation*
Dental Cavity Preparation/instrumentation*	AND	Ultrasonic Therapy/instrumentation*
Dental Cavity Preparation/methods	AND	Ultrasonic Therapy/instrumentation*
Tooth Preparation/instrumentation*	AND	Ultrasonic Therapy/instrumentation*
Dental Caries/therapy*	AND	Oscillometry/instrumentation
Dental Cavity Preparation/instrumentation*	AND	Oscillometry/instrumentation
Dental Cavity Preparation/methods	AND	Oscillometry/instrumentation
Tooth Preparation/instrumentation*	AND	Oscillometry/instrumentation
Dental Caries/therapy*	AND	Sonic
Dental Cavity Preparation/instrumentation*	AND	Sonic
Dental Cavity Preparation/methods	AND	Sonic
Tooth Preparation/instrumentation*	AND	Sonic
Dental Caries/therapy*	AND	Ultrasonic Therapy/adverse effects
Dental Cavity Preparation/instrumentation*	AND	Ultrasonic Therapy/adverse effects
Dental Cavity Preparation/methods	AND	Ultrasonic Therapy/adverse effects
Dental Caries/therapy*	AND	Sonication
Dental Cavity Preparation/instrumentation*	AND	Sonication
Dental Cavity Preparation/methods	AND	Sonication
Tooth Preparation/instrumentation*	AND	Sonication
Dental Caries/therapy*	AND	Oscillometry/adverse effects
Dental Cavity Preparation/instrumentation*	AND	Oscillometry/adverse effects
Dental Cavity Preparation/methods	AND	Oscillometry/adverse effects
Tooth Preparation/instrumentation*	AND	Oscillometry/adverse effects
Dental Caries/therapy*	AND	Sonoabrasive

Dental Cavity	AND	Sonoabrasive
Preparation/instrumentation*		
Dental Cavity Preparation/methods	AND	Sonoabrasive
Tooth Preparation/instrumentation*	AND	Sonoabrasive

Appendix 2. The reasons leading to the exclusion of retrieved full texts.

n.	Author	Reason for Exclusion
1	Banerjee 2000	Literature narrative review
2	Josgrilberg 2007	In vitro study
3	Haase 1998	Case report
4	Koczarski 2007	Case report
5	Koubi 2008	Descriptive study
6	Mota 2013	Descriptive study
7	Ntovas 2017	Literature narrative review
8	Predebon 2006	Observational study)
9	Sheets 2002	Case report
10	Tassery 2013	Descriptive study
11	Thomas 2012	Descriptive study
12	Wicht 2002	In vitro study
13	Yildirim 2010	In vitro study