

# Reporting characteristics of systematic review abstracts published in the proceedings of the SBPqO meeting

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**Aim:** This study aimed to assess the reporting characteristics of systematic review abstracts published in the proceedings of the *Sociedade Brasileira de Pesquisa Odontológica* (SBPqO) meeting. **Methods:** We selected abstracts published in the SBPqO meeting proceedings of 2019 and 2020, mentioning that a systematic review was conducted in the title, objective or methods sections. One researcher performed the screening and the data extraction after a pilot test training. The following data were extracted: affiliation of the primary author, dental specialization, the term “systematic review” mentioned in the title, reporting of the objective, reporting of eligibility criteria, reporting of information sources, reporting of the number of included studies and if a meta-analysis was performed. A descriptive analysis of the data was performed with data summarized as frequencies. **Results:** We included 235 abstracts. A total of 20 studies were from the Universidade de Uberlândia (8.5%), and the main specialization was Restorative and Esthetic Dentistry, with 47 studies (20%). Most of the studies mentioned the term “systematic review” in the title (n=219; 93.2%) and reported the objective (n=231; 98.3%). A great majority of studies did not report the eligibility criteria (n=97; 41.3%) or it was classified as unclear (n=96; 40.8%). The great majority of studies only reported the databases searched (n=103; 43.8%) or databases and date of search (n=74; 31.5%). Most of the studies reported the number of included studies (n=204; 86.8%). **Conclusion:** Based on this study, the reporting characteristics of systematic review abstracts published in the proceedings of the SBPqO meeting are satisfactory. However, there is room for improvement.

**Keywords:** Dental research. Research report. Systematic reviews of topic.



## Introduction

A systematic review is an important tool in health, and it is used for identifying, appraising, and integrating the results of a specific field<sup>1,2</sup>. The number of systematic reviews in dentistry has been increasing in recent years, and the reporting quality is highly variable<sup>3-5</sup>.

Much health research is presented at conferences and is publicly available as abstracts in the proceedings. The reporting quality of these abstracts is important because systematic reviewers will in some situations decide to include a study (or not) based on the conference abstract because the full article is not available. The reporting quality of conference abstracts was assessed in different topics in health, including sports injury prevention, oncology, urology, psychiatry, surgery, and oral health<sup>6-13</sup>. However, there are no studies assessing abstracts of systematic reviews in dentistry published in the proceedings of conferences.

The *Sociedade Brasileira de Pesquisa Odontológica* (SBPqO) meeting is the most important conference in oral health research in Brazil, and it is the Brazilian division of the International Association for Dental Research. Since 2019, the SBPqO meeting has presented a special section dedicated to systematic review presentation, and all studies are published in the proceedings of the SBPqO meeting<sup>14,15</sup>. Therefore, this study aimed to assess the reporting characteristics of systematic review abstracts published in the proceedings of the SBPqO meeting.

## Material and Methods

### Eligibility criteria and search

We included abstracts mentioning that a systematic review was conducted in the title, objective, or methods sections, regardless of the dental specialization discussed. We excluded studies which cited performing scoping reviews, overviews or assessing reporting quality of studies, or other methodological aspects characterizing the study as a meta-research.

We performed a search in the proceedings of 2019<sup>14</sup> and 2020<sup>15</sup> to identify abstracts based on the eligibility criteria cited above, examining only the Systematic Reviews section.

### Screening

Two researchers initially performed a pilot screening test discussing the inclusion criteria using the 2018 proceedings of the SBPqO meeting. One of the researchers subsequently identified studies by reviewing the titles and abstracts through the pdf versions of the 2019 and 2020 proceedings available at [www.sbpqo.org.br](http://www.sbpqo.org.br). In case of any doubts, the opinion of a second researcher was requested.

### Data extraction

We created a standardized form using the Excel program (Microsoft Excel 2020). We initially performed a pilot data extraction through a discussion between two reviewers to consider all data for extraction. Data from each systematic review were

subsequently extracted by one reviewer. The following data were collected: affiliation of primary author, dental specialization (Public Health, Endodontics, Oral and Maxillofacial Pathology/stomatology, Radiology, Oral and Maxillofacial Surgery, Restorative and Esthetic Dentistry, Pediatric Dentistry, Periodontics, Orthodontics/Orthopedics, Implantology, and Others), the term "systematic review" mentioned in the title (Yes or No), reporting of the objective (Yes or No), reporting of eligibility criteria (Only inclusion criteria, Only exclusion criteria, Inclusion and exclusion criteria, Unclear, Not reported), reporting of information sources (Only databases, Only date of search, Databases and date of search, Unclear, Not reported), reporting of the number of included studies (Yes, No, Unclear) and if a meta-analysis was performed (Yes or No).

## Data analysis

A descriptive analysis of the data was performed with the data summarized as frequencies using the Excel program (Microsoft Excel 2020).

## Results

We identified 262 abstracts published in the proceedings of the SBPqO meeting and classified as "systematic review". We included 235 abstracts after the screening based on the eligibility criteria (see Supplemental Material).

Table 1 presents the data related to the affiliation of the primary author and the dental specialization of the abstract. As a result, 20 studies were from the Universidade de Uberlândia (8.5%), followed by the Universidade de Santa Catarina (n=16;6.8%), while the Universidade Federal do Pará, Universidade Federal do Rio de Janeiro, Faculdade de Odontologia de Piracicaba (UNICAMP), and the Universidade Estadual Paulista (Araçatuba) presented 15 studies each (6.4%). The main specialization was Restorative and Esthetic Dentistry, numbering 47 studies (20%), followed by Oral and Maxillofacial Pathology/stomatology (n=41; 17.4%).

**Table 1.** Characteristics of included studies

Filiation of main author	N	%
Universidade Federal de Uberlândia	20	8.5%
Universidade Federal de Santa Catarina	16	6.8%
Faculdade de Odontologia de Piracicaba (Unicamp)	15	6.4%
Universidade Federal do Pará	15	6.4%
Universidade Federal do Rio de Janeiro	15	6.4%
Universidade Estadual Paulista - Araçatuba	15	6.4%
Universidade Federal de Minas Gerais	10	4.3%
Faculdade de Odontologia de São Leopoldo Mandic	9	3.8%
Universidade Federal do Rio Grande do Sul	8	3.4%
Universidade Federal Fluminense	7	3.0%
Universidade Estadual da Paraíba	7	3.0%
Universidade do Estado do Rio de Janeiro	6	2.55%
Universidade de Pernambuco	5	2.13%

Continue

Continuation

Universidade de São Paulo - São Paulo	5	2.13%
Universidade Federal Fluminense- Pólo Nova Friburgo	4	1.7%
Universidade Positivo	4	1.7%
Universidade Federal da Paraíba	4	1.7%
Universidade de São Paulo- Bauru	4	1.7%
Pontifícia Universidade Católica de Minas Gerais	4	1.7%
Universidade de São Paulo- Ribeirão Preto	4	1.7%
Centro Universitário CHRISTUS	3	1.3%
Universidade Federal do Ceará	3	1.3%
Universidade de Cuiába	3	1.3%
Universidade Federal de Juiz de Fora	3	1.3%
Universidade Estadual de Ponta Grossa	3	1.3%
Universidade de Brasília	3	1.3%
Universidade Estadual do Pará	2	0.8%
Universidade do Oeste Paulista	2	0.8%
Instituto de Ciências e Tecnologia / ICT-UNESP-SJC	2	0.8%
Centro de Estudos Superiores de Maceió	2	0.8%
Universidade Federal de Pelotas	2	0.8%
Universidade Santo Amaro	2	0.8%
Faculdade Paulo Picanço	2	0.8%
Universidade Federal do Amazonas	2	0.8%
Universidade Ibirapuera	2	0.8%
Universidade Luterana do Brasil	1	0.4%
Universidade Cruzeiro do Sul	1	0.4%
Universidade Federal de Goiás	1	0.4%
Faculdade Federal da Paraíba	1	0.4%
Universidade Federal do Paraná	1	0.4%
Universidade Norte do Paraná	1	0.4%
Faculdade de Odontologia de Nova Friburgo	1	0.4%
Pontifícia Universidade Católica do Rio Grande do Sul	1	0.4%
Faculdade Meridional	1	0.4%
Universidade Federal de Pernambuco	1	0.4%
Universidade Federal do Maranhão	1	0.4%
Centro Universitário Santo Agostinho	1	0.4%
Universidade Iguazu	1	0.4%
Universidade Estadual Paulista - Araraquara	1	0.4%
Universidade Federal do Espírito Santo	1	0.4%
Centro Universitário da Fundação Hermínio Ometto	1	0.4%
Escola Bahiana de Medicina e Saúde Pública	1	0.4%
Universidade Estadual de Maringá	1	0.4%
Universidade Nove de Julho	1	0.4%
Pontifícia Universidade Católica do Paraná	1	0.4%
Universidade de Taubaté	1	0.4%

Continue

Continuation		
Universidade Guarulhos	1	0.4%
Dental specialties		
Restorative and Esthetic Dentistry	47	20.00%
Oral and Maxillofacial Pathology/stomatology	41	17.4%
Orthodontics/Orthopedics	28	11.9%
Periodontics	26	11.1%
Endodontics	25	10.6%
Pediatric Dentistry	18	7.7%
Public Health	16	6.8%
Oral and Maxillofacial Surgery	15	6.4%
Implantology	11	4.7%
Radiology	6	2.5%
Others	2	0.8%

Figure 1 presents the reporting characteristics of the included abstracts. Most of studies mentioned the term "systematic review" in the title ( $n=219$ ; 93.2%) and reported the objective ( $n=231$ ; 98.3%). A great majority of studies did not report the eligibility criteria ( $n=97$ ; 41.3%) or it was classified as unclear ( $n=96$ ; 40.8%). In addi-

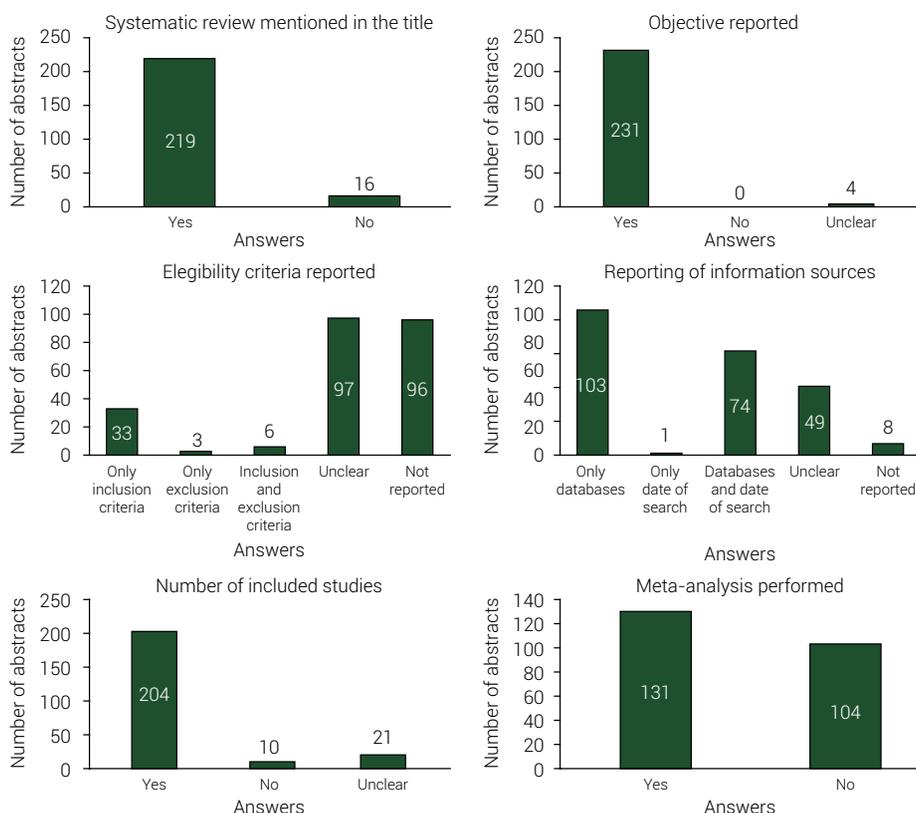


Figure 1. Reporting characteristics of included abstracts.

tion, the great majority of studies only reported the databases searched (n=103; 43.8%) or databases and date of search (n=74; 31.5%). Most of the studies reported the number of included studies (n=204; 86.8%), and most of the studies performed a meta-analysis (n=131; 55.7%).

## Discussion

This is the first study in dentistry to assess the reporting characteristics of systematic review abstracts published in proceedings of conferences. Our results demonstrated that most of the aspects evaluated are well-reported, and we believe that results could be related to the fact that the conference abstracts included were peer-reviewed by experienced reviewers before the publication of conference proceedings. Also, our results are significant because the abstract could become a pivotal element to support clinical decision-making in some situations, as highlighted by Johnson et al. (2013)<sup>16</sup>.

However, most studies did not report the eligibility criteria, or it was classified as unclear. This fact could be related to the limited number of words to write the abstract. Details about what evidence was eligible or ineligible are important to the readers to comprehend the review scope. One of the possibilities to report the eligibility criteria is to use the PICO framework highlighting the Population, Intervention, Comparator, and Outcome included in the review<sup>17</sup>.

A significant number of systematic review abstracts (n=235) were presented in the SBPqO meeting since establishing a special section for this type of study. Three aspects could be involved in this result: 1) Bassani et al. (2019)<sup>3</sup> demonstrated that Brazil is one of the countries that publish the most systematic reviews in dentistry; 2) Dotto et al. (2020)<sup>18</sup> showed that systematic reviews are well accepted as a Master's or PhD thesis by Brazilian graduate programs in dentistry; and 3) Brazil has an upper-middle-income economy and systematic reviews are cheaper than other methodologies such as randomized controlled trials resulting in a research methodology appropriate for this setting<sup>18</sup>.

When analyzing the primary authors' affiliation, we can observe universities from different regions of Brazil which presented systematic reviews in the SBPqO meeting. The top university contributors could be the institutions where systematic reviews are well accepted in graduate programs, reflecting in their students presenting systematic reviews in that meeting. The main specializations reported were Restorative and Esthetic Dentistry (20%) and Oral and Maxillofacial Pathology/stomatology (17.4%). Bassani et al. (2019)<sup>3</sup> found that most specialization reporting in systematic reviews in dentistry indexed within PubMed during 2017 was Oral and Maxillofacial Surgery, followed by Oral and Maxillofacial Pathology/stomatology.

The PRISMA 2020 statement<sup>17</sup> was recently published, providing an updated reporting guidance for systematic review abstracts. The guidance includes a 12-item checklist specifying details about the systematic review title, background, methods, results, discussion, funding and registration. However, the number of words in abstracts could be limited in some conferences, jeopardizing the completeness of information reported. For example, the SBPqO recommendations about the number of words in

abstracts allow 1,470 characters, 120 in the title and 1,350 in the body of the text<sup>19</sup>. Also, the recommendations of the International Association for Dental Research<sup>20</sup> General Session for abstracts allow 300 words or less, which is better than SBPqO, but it is still limited. We believe that it would be better to expand the number of words accepted in abstracts, but there are costs involved in this process. Also, one crucial aspect is including the use of reporting guidelines in the instructions to authors to help in the abstract writing.

The most important limitation of our study is that we did not assess the abstracts published before the establishment of a systematic review section, and it is impossible to evaluate the impact of this establishment in terms of the number of systematic reviews abstracts and reporting quality, and we did not assess all items recommended by PRISMA for abstracts. We believe that future assessments should focus on spin strategies and the extent and level of spin involved in systematic reviews abstracts.

Thus, in light of the existence of a specific guideline for systematic review abstracts (PRISMA 2020)<sup>17</sup>, the SBPqO, which is the most important conference in oral health research in Brazil, should endorse the use of this statement to improve the reporting of abstracts and encourage students and researchers to use it.

In conclusion, based on this study, the reporting characteristics of systematic review abstracts published in the proceedings of the SBPqO meeting are satisfactory. However, there is room for improvement.

## Acknowledgements

This study was conducted in a Graduate Program supported by CAPES, Brazil (Finance Code 001). RSO is funded in part by Meridional Foundation (Passo Fundo, Brazil), and WVOS is funded by the National Council for Scientific and Technological Development (CNPq, Brazil). However, these supporters had no role in the design of the study, in the collection or analysis of data, in the decision to publish or in preparing the manuscript.

## Data availability

Datasets related to this article will be available upon request to the corresponding author.

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## Supplemental material

### List of numbers of included abstracts (2019).

1-RS001	42-RS045	83-RS097
2-RS002	43-RS046	84-RS098
3-RS003	44-RS048	85-RS099
4-RS004	45-RS049	86-RS100
5-RS005	46-RS050	87-RS101
6-RS006	47-RS051	88-RS102
7-RS007	48-RS052	89-RS103
8-RS008	49-RS054	90-RS104
9-RS010	50-RS055	91-RS105
10-RS011	51-RS057	92-RS106
11-RS012	52-RS058	93-RS107
12-RS013	53-RS059	94-RS109
13-RS014	54-RS060	95-RS110
14-RS016	55-RS061	96-RS111
15-RS017	56-RS062	97-RS113
16-RS018	57-RS064	98-RS114
17-RS019	58-RS065	99-RS115
18-RS020	59-RS068	100-RS116
19-RS021	60-RS069	101-RS117
20-RS022	61-RS070	102-RS118
21-RS023	62-RS071	103-RS119
22-RS024	63-RS072	104-RS121
23-RS025	64-RS073	105-RS122
24-RS026	65-RS075	106-RS123
25-RS027	66-RS076	107-RS124
26-RS028	67-RS077	108-RS126
27-RS029	68-RS078	109-RS128
28-RS030	69-RS079	110-RS129
29-RS031	70-RS082	111-RS130
30-RS032	71-RS083	112-RS131
31-RS033	72-RS084	113-RS132
32-RS034	73-RS085	114-RS134
33-RS035	74-RS086	115-RS135
34-RS036	75-RS087	116-RS136
35-RS037	76-RS088	117-RS137
36-RS038	77-RS090	118-RS138
37-RS040	78-RS091	119-RS139
38-RS041	79-RS092	120-RS140
39-RS042	80-RS093	121-RS142
40-RS043	81-RS094	
41-RS044	82-RS096	

## List of numbers of included abstracts (2020).

122-RS001	160-RS041	198-RS081
123-RS002	161-RS043	199-RS082
124-RS003	162-RS044	200-RS083
125-RS004	163-RS045	201-RS084
126-RS005	164-RS046	202-RS085
127-RS006	165-RS048	203-RS086
128-RS007	166-RS049	204-RS087
129-RS008	167-RS050	205-RS088
130-RS009	168-RS051	206-RS089
131-RS010	169-RS052	207-RS090
132-RS012	170-RS053	208-RS091
133-RS013	171-RS054	209-RS092
134-RS014	172-RS055	210-RS093
135-RS015	173-RS056	211-RS094
136-RS016	174-RS057	212-RS095
137-RS017	175-RS058	213-RS096
138-RS018	176-RS059	214-RS097
139-RS019	177-RS060	215-RS098
140-RS020	178-RS061	216-RS099
141-RS021	179-RS062	217-RS100
142-RS023	180-RS063	218-RS101
143-RS024	181-RS064	219-RS102
144-RS025	182-RS065	220-RS103
145-RS026	183-RS066	221-RS104
146-RS027	184-RS067	222-RS105
147-RS028	185-RS068	223-RS107
148-RS029	186-RS069	224-RS108
149-RS030	187-RS070	225-RS109
150-RS031	188-RS071	226-RS111
151-RS032	189-RS072	227-RS112
152-RS033	190-RS073	228-RS113
153-RS034	191-RS074	229-RS114
154-RS035	192-RS075	230-RS115
155-RS036	193-RS076	231-RS116
156-RS037	194-RS077	232-RS117
157-RS038	195-RS078	233-RS118
158-RS039	196-RS079	234-RS119
159-RS040	197-RS080	235-RS120

## Characteristics of each abstract included.

Author/Year	Systematic review mentioned in the title	Objective reported	Eligibility criteria reported	Reporting of information sources	Number of included studies	Meta-analysis conducted
Nunes et al., 2019	Yes	Yes	Not reported	Only databases	Yes	Yes
Reis et al., 2019	Yes	Yes	Only inclusion	Only databases	Yes	No
Frazão et al., 2019	Yes	Yes	Only inclusion	Only databases	Yes	Yes
Granja et al., 2019	Yes	Yes	Unclear	Unclear	Yes	Yes
Lacerda-Santos et al., 2019	Yes	Yes	Unclear	Unclear	Yes	Yes
Paulo et al., 2019	Yes	Yes	Not reported	Only databases	Yes	No
Pereira et al., 2019	Yes	Yes	Not reported	Only databases	Yes	Yes
Cetira-Filho	Yes	Yes	Unclear	Only databases	Unclear	Yes
Novais et al., 2019	Yes	Yes	Unclear	Unclear	Yes	Yes
Amaral et al., 2019	Yes	Yes	Not reported	Only databases	Yes	No
Thuller et al., 2019	Yes	Yes	Only exclusion	Only databases	Yes	Yes
Falcão et al., 2019	Yes	Yes	Unclear	Both	Yes	Yes
Barbosa et al., 2019	Yes	Yes	Only inclusion	Only databases	Yes	No
Stringhini-Junior et al., 2019	Yes	Yes	Unclear	Both	Yes	Yes
Moraes et al., 2019	Yes	Yes	Only inclusion	Both	Yes	Yes
Alves et al., 2019	Yes	Yes	Only inclusion	Both	Yes	Yes
Basso et al., 2019	Yes	Yes	Unclear	Only databases	Yes	Yes
Wembier et al., 2019	Yes	Yes	Unclear	Only databases	Yes	Yes
Silva et al., 2019	Yes	Yes	Unclear	Both	Yes	Yes
Bronzato et al., 2019	Yes	Yes	Unclear	Only databases	Yes	Yes
Albuquerque et al., 2019	Yes	Yes	Not reported	Both	Yes	No
Castro et al., 2019	Yes	Yes	Unclear	Only databases	Yes	Yes
Pinto et al., 2019	Yes	Yes	Unclear	Both	Yes	Yes
Scarsi et al., 2019	Yes	Yes	Only inclusion	Only databases	Yes	Yes
Campos et al., 2019	Yes	Yes	Unclear	Only databases	Yes	Yes
Spinola et al., 2019	Yes	Yes	Not reported	Only databases	Yes	No
Oliveira et al., 2019	Yes	Yes	Not reported	Only databases	Yes	Yes
Terto et al., 2019	Yes	Yes	Only exclusion	Both	Yes	Yes
Castilho et al., 2019	Yes	Yes	Unclear	Only databases	Yes	Yes
Lima et al., 2019	Yes	Yes	Unclear	Unclear	No	Yes
Andrade et al., 2019	Yes	Yes	Unclear	Only databases	Yes	Yes
Baroni et al., 2019	Yes	Yes	Unclear	Only databases	Yes	No
Rende et al., 2019	No	Yes	Unclear	Unclear	Yes	Yes
Guimaraes et al., 2019	No	Yes	Not reported	Only databases	Yes	Yes
Fontes et al., 2019	Yes	Yes	Unclear	Only databases	Yes	No
Dantas et al., 2019	Yes	Yes	Only inclusion	Both	Yes	Yes

Continue

Continuation

Milani et al., 2019	Yes	Yes	Unclear	Only databases	Unclear	Yes
Bedran et al., 2019	Yes	Yes	Not reported	Only databases	Yes	Yes
Cruz et al., 2019	Yes	Yes	Not reported	Unclear	Yes	Yes
Ribeiro-Lages et al., 2019	Yes	Yes	Not reported	Only databases	Yes	Yes
Mocchelini et al., 2019	Yes	Yes	Not reported	Only databases	Yes	Yes
Masson et al., 2019	Yes	Yes	Unclear	Both	Yes	Yes
Duarte et al., 2019	Yes	Yes	Not reported	Only databases	Yes	Yes
Seabra et al., 2019	Yes	Yes	Not reported	Both	Yes	Yes
Nadelman et al., 2019	Yes	Yes	Only inclusion	Only databases	Yes	No
Messignan et al., 2019	Yes	Yes	Not reported	Only databases	Yes	Yes
Dantas et al., 2019	Yes	Yes	Not reported	Unclear	No	No
Gonçalves et al., 2019	No	Yes	Not reported	Only databases	Yes	Yes
Oliveira et al., 2019	Yes	Yes	Both	Both	Yes	No
Bellini-Pereira et al., 2019	Yes	Yes	Only inclusion	Both	Yes	Yes
Prado et al., 2019	Yes	Yes	Only inclusion	Only databases	Yes	Yes
Pinheiro et al., 2019	Yes	Yes	Unclear	Only databases	Yes	No
Cardoso et al., 2019	Yes	Yes	Not reported	Both	Yes	Yes
Farias Junior et al., 2019	Yes	Yes	Unclear	Both	Yes	No
Silva et al., 2019	Yes	Yes	Only inclusion	Both	Yes	No
Silveira et al., 2019	Yes	Yes	Unclear	Unclear	Yes	No
Nascimento et al., 2019	Yes	Yes	Unclear	Both	Yes	No
Neves et al., 2019	Yes	Yes	Unclear	Not reported	Unclear	Yes
Nunes et al., 2019	Yes	Yes	Unclear	Only databases	Unclear	No
Lins et al., 2019	No	Yes	Not reported	Only databases	Yes	Yes
Farias et al., 2019	Yes	Yes	Unclear	Only databases	Yes	No
Dietrich et al., 2019	Yes	Yes	Unclear	Both	Yes	No
Polmann et al., 2019	Yes	Yes	Not reported	Only databases	Yes	No
Maran et al., 2019	Yes	Yes	Not reported	Only databases	Yes	Yes
Lima et al., 2019	No	Yes	Unclear	Both	Yes	No
Martini et al., 2019	Yes	Yes	Not reported	Only databases	Yes	No
Antonio et al., 2019	Yes	Yes	Only inclusion	Only databases	Yes	No
Né et al., 2019	Yes	Yes	Unclear	Unclear	Yes	No
Fidalgo et al., 2019	Yes	Yes	Unclear	Only databases	Yes	No
Nascimento et al., 2019	No	Yes	Not reported	Only databases	Yes	Yes
Bacchin et al., 2019	Yes	Yes	Not reported	Only databases	Yes	No
Roithmann et al., 2019	Yes	Yes	Unclear	Both	Yes	Yes
Maroli et al., 2019	Yes	Yes	Both	Only databases	Yes	No
Carneiro-Campos et al., 2019	Yes	Yes	Only inclusion	Both	Unclear	Yes
Brunetto et al., 2019	Yes	Yes	Unclear	Both	Yes	Yes

Continue

Continuation

Minatel et al., 2019	Yes	Yes	Not reported	Only databases	Yes	No
Lemos et al., 2019	Yes	Yes	Not reported	Unclear	Yes	Yes
Silva et al., 2019	Yes	Yes	Unclear	Both	Yes	Yes
Barcelos et al., 2019	Yes	Yes	Only exclusion	Both	Yes	No
Gomez et al., 2019	Yes	Yes	Not reported	Both	Yes	No
Magalhães et al., 2019	Yes	Yes	Not reported	Only databases	Yes	No
Sarmiento et al., 2019	Yes	Yes	Unclear	Both	Yes	No
Barbosa et al., 2019	Yes	Yes	Not reported	Unclear	Yes	Yes
Lhano et al., 2019	Yes	Yes	Unclear	Only databases	Unclear	Yes
Oliveira et al., 2019	Yes	Yes	Not reported	Both	Yes	Yes
Nascimento et al., 2019	No	Yes	Not reported	Only databases	Yes	Yes
Oliveira et al., 2019	Yes	Yes	Unclear	Only databases	Yes	Yes
Silva et al., 2019	Yes	Yes	Both	Only databases	Yes	Yes
Dutra et al., 2019	Yes	Yes	Not reported	Only databases	Unclear	Yes
Macedo-Filho et al., 2019	Yes	Yes	Unclear	Both	Yes	Yes
Oliveira et al., 2019	Yes	Yes	Not reported	Unclear	Yes	Yes
Kammer et al., 2019	Yes	Yes	Not reported	Unclear	Yes	Yes
Berretta et al., 2019	Yes	Yes	Only inclusion	Unclear	Yes	No
Diniz et al., 2019	Yes	Yes	Unclear	Unclear	Yes	No
Reis et al., 2019	Yes	Yes	Unclear	Unclear	Yes	No
Silveira et al., 2019	Yes	Yes	Only inclusion	Unclear	Yes	Yes
Martins et al., 2019	Yes	Yes	Not reported	Unclear	Yes	Yes
Jerônimo et al., 2019	Yes	Yes	Unclear	Unclear	Yes	Yes
Rosa et al., 2019	Yes	Yes	Unclear	Both	Yes	Yes
Lago et al., 2019	Yes	Yes	Unclear	Both	Yes	Yes
Haas et al., 2019	No	Unclear	Unclear	Only databases	Yes	Yes
Melo et al., 2019	Yes	Yes	Unclear	Unclear	Yes	No
Lavôr et al., 2019	Yes	Yes	Unclear	Unclear	Yes	No
Oliveira et al., 2019	Yes	Yes	Unclear	Both	Yes	No
Paulo et al., 2019	Yes	Yes	Unclear	Unclear	Yes	Yes
Lisboa et al., 2019	Yes	Yes	Not reported	Only databases	Yes	No
Martins et al., 2019	Yes	Yes	Only inclusion	Only databases	Yes	No
Campos et al., 2019	Yes	Yes	Not reported	Only databases	No	No
Rolim et al., 2019	Yes	Yes	Unclear	Both	Yes	Yes
Silva et al., 2019	Yes	Yes	Unclear	Only databases	Yes	Yes
Campos et al., 2019	Yes	Yes	Not reported	Unclear	Unclear	No
Souza et al., 2019	Yes	Yes	Unclear	Only databases	Yes	Yes
Miranda et al., 2019	Yes	Yes	Not reported	Only databases	Yes	Yes
Raymundo et al., 2019	Yes	Yes	Not reported	Only databases	No	Yes
Caldas et al., 2019	Yes	Yes	Not reported	Both	Yes	No

Continue

Continuation

Miranda et al., 2019	Yes	Yes	Unclear	Only databases	Yes	No
Alvarenga et al., 2019	Yes	Yes	Not reported	Unclear	Yes	Yes
Santos et al., 2019	No	Yes	Not reported	Only databases	Yes	No
Rendohl et al., 2019	Yes	Yes	Only inclusion	Both	No	Yes
Limírio et al., 2019	Yes	Yes	Not reported	Both	Yes	Yes
Borges et al., 2019	Yes	Yes	Not reported	Not reported	Yes	Yes
Reis et al., 2020	Yes	Yes	Unclear	Only databases	Yes	No
Gonçalves et al., 2020	Yes	Yes	Unclear	Both	Yes	Yes
Vidigal et al., 2020	Yes	Yes	Not reported	Unclear	Yes	Yes
Leal et al., 2020	Yes	Yes	Not reported	Both	Yes	No
Silva et al., 2020	No	Yes	Unclear	Both	Yes	No
Rosatto et al., 2020	Yes	Yes	Not reported	Unclear	Yes	No
Sarmiento et al., 2020	Yes	Yes	Not reported	Unclear	Yes	No
Matos et al., 2020	Yes	Yes	Not reported	Unclear	Yes	No
Gabriel et al., 2020	Yes	Yes	Not reported	Unclear	Yes	Yes
Dias-Junior et al., 2020	Yes	Yes	Unclear	Only databases	Yes	Yes
Nóbrega et al., 2020	Yes	Yes	Unclear	Only databases	Unclear	Yes
Sponchiado-Júnior et al., 2020	Yes	Yes	Unclear	Only databases	Yes	No
Martins et al., 2020	Yes	Yes	Unclear	Only databases	Yes	No
Pirovani et al., 2020	Yes	Yes	Unclear	Both	Yes	No
Feitosa et al., 2020	Yes	Yes	Only inclusion	Only databases	Yes	No
Salomão et al., 2020	Yes	Yes	Only inclusion	Only databases	Yes	Yes
Kwiatkowski et al., 2020	Yes	Yes	Unclear	Both	Yes	No
Lopes et al., 2020	Yes	Yes	Unclear	Only databases	Yes	No
Soares et al., 2020	Yes	Yes	Not reported	Only databases	Yes	No
Né et al., 2020	Yes	Yes	Unclear	Only databases	Yes	Yes
Carvalho et al., 2020	Yes	Yes	Unclear	Only databases	Yes	No
Araujo et al., 2020	Yes	Yes	Not reported	Only databases	Yes	No
Silver et al., 2020	Yes	Yes	Only inclusion	Only databases	Yes	Yes
Schoeffel et al., 2020	Yes	Yes	Only inclusion	Unclear	Yes	Yes
Muknickas et al., 2020	Yes	Yes	Unclear	Only databases	Unclear	No
Rezende et al., 2020	Yes	Yes	Unclear	Both	Yes	No
Oliveira et al., 2020	Yes	Yes	Only inclusion	Both	Yes	Yes
Cruz et al., 2020	Yes	Yes	Not reported	Unclear	Yes	Yes
Oliveira et al., 2020	Yes	Yes	Both	Both	Yes	No
Martins et al., 2020	Yes	Yes	Not reported	Only databases	Yes	Yes
Mocchelini et al., 2020	Yes	Yes	Not reported	Only databases	Yes	Yes
Miyahira et al., 2020	Yes	Yes	Unclear	Only databases	Yes	Yes
Machado et al., 2020	Yes	Yes	Only inclusion	Both	Yes	No
Miranda et al., 2020	Yes	Yes	Only inclusion	Both	Yes	No

Continue

Continuation

Soares et al., 2020	Yes	Yes	Unclear	Both	Yes	No
Pintor et al., 2020	Yes	Yes	Only inclusion	Both	Yes	No
Camatta et al., 2020	Yes	Yes	Unclear	Only databases	No	Yes
Sanglard et al., 2020	Yes	Yes	Not reported	Both	Yes	No
Haibara et al., 2020	Yes	Yes	Unclear	Both	Yes	No
Fontes et al., 2020	Yes	Yes	Unclear	Only databases	Yes	No
Latieri et al., 2020	Yes	Yes	Unclear	Both	Yes	No
Bonzanini et al., 2020	Yes	Yes	Not reported	Both	Yes	Yes
Soares et al., 2020	Yes	Yes	Not reported	Only databases	Yes	Yes
Neves et al., 2020	Yes	Yes	Not reported	Only databases	Yes	No
Inocência et al., 2020	No	Yes	Unclear	Unclear	Unclear	Yes
Figueiredo et al., 2020	Yes	Unclear	Unclear	Both	Unclear	No
Rodrigues et al., 202	Yes	Yes	Unclear	Both	Unclear	No
Jácome-Santos et al., 2020	Yes	Yes	Not reported	Both	Yes	No
Sant'Anna et al., 2020	Yes	Yes	Not reported	Only databases	Yes	Yes
Sant'anna et al., 2020	Yes	Yes	Unclear	Unclear	Yes	Yes
Mattos et al., 2020	Yes	Yes	Unclear	Both	Yes	Yes
Silveira-Júnior et al., 2020	Yes	Yes	Not reported	Only databases	Yes	No
Caetano et al., 2020	Yes	Yes	Unclear	Only databases	Yes	No
Figueiredo et al., 2020	Yes	Yes	Only inclusion	Only databases	No	Yes
Naal et al., 2020	Yes	Yes	Unclear	Both	Yes	No
Tardelli et al., 2020	Yes	Yes	Only inclusion	Both	Unclear	No
Lopes et al., 2020	Yes	Yes	Only inclusion	Both	Unclear	Yes
Kunz et al., 2020	No	Yes	Unclear	Only databases	Yes	Yes
Uehara et al., 2020	Yes	Yes	Both	Only databases	Yes	No
Limirio et al., 2020	Yes	Yes	Not reported	Both	Yes	Yes
Sanches et al., 2020	Yes	Yes	Not reported	Both	Yes	Yes
Veloso et al., 2020	Yes	Yes	Only inclusion	Only databases	Yes	Yes
Oliveira et al., 2020	Yes	Yes	Only inclusion	Unclear	Yes	Yes
Ortiz et al., 2020	Yes	Yes	Only inclusion	Unclear	Yes	No
Scherer et al., 2020	Yes	Yes	Not reported	Both	Yes	Yes
Andrade et al., 2020	Yes	Yes	Unclear	Only databases	Yes	No
Martini et al., 2020	Yes	Yes	Not reported	Only databases	Unclear	Yes
Valesan et al., 2020	Yes	Yes	Unclear	Unclear	Yes	Yes
Oliveira et al., 2020	Yes	Yes	Not reported	Unclear	Yes	Yes
Santos et al., 2020	Yes	Yes	Not reported	Only databases	Yes	Yes
Corso et al., 2020	Yes	Yes	Not reported	Only databases	Yes	Yes
Gama et al., 2020	Yes	Yes	Unclear	Unclear	Yes	No
Pinto et al., 2020	Yes	Yes	Unclear	Both	Yes	No
Parize et al., 2020	Yes	Yes	Not reported	Unclear	Yes	No

Continue

## Continuation

Sabatini et al., 2020	Yes	Yes	Unclear	Unclear	Yes	No
Camarini et al., 2020	Yes	Yes	Not reported	Not reported	No	No
Sakuma et al., 2020	Yes	Yes	Not reported	Unclear	Yes	Yes
Silva et al., 2020	Yes	Yes	Not reported	Only databases	No	Yes
Santaella et al., 2020	Yes	Yes	Not reported	Only databases	Yes	No
Guerra et al., 2020	Yes	Yes	Not reported	Not reported	Yes	Yes
Munhoz et al., 2020	No	Yes	Not reported	Only date	Yes	No
Ibarra et al., 2020	Yes	Yes	Not reported	Not reported	Yes	No
Ribeiro et al., 2020	Yes	Yes	Not reported	Both	Yes	No
Galdino et al., 2020	Yes	Yes	Not reported	Only databases	Yes	Yes
Magrin et al., 2020	Yes	Yes	Unclear	Unclear	Yes	No
Souza et al., 2020	Yes	Yes	Not reported	Both	Yes	Yes
Borges et al., 2020	Yes	Yes	Only inclusion	Both	Yes	Yes
Magalhães et al., 2020	Yes	Yes	Both	Only databases	Yes	No
Martinho et al., 2020	No	Yes	Not reported	Unclear	Unclear	Yes
Souza et al., 2020	Yes	Yes	Unclear	Both	Yes	Yes
Resende et al., 2020	Yes	Yes	Unclear	Only databases	Yes	Yes
Langa et al., 2020	Yes	Yes	Unclear	Unclear	Yes	Yes
Basso et al., 2020	No	Yes	Unclear	Only databases	Yes	No
Oliveira et al., 2020	Yes	Unclear	Not reported	Unclear	Yes	Yes
Campos et al., 2020	Yes	Yes	Not reported	Both	Unclear	Yes
Albuini et al., 2020	Yes	Yes	Unclear	Not reported	Yes	No
Koch et al., 2020	Yes	Yes	Unclear	Only databases	Yes	No
Soares et al., 2020	Yes	Yes	Unclear	Unclear	Unclear	Yes
Jakymiu et al., 2020	Yes	Unclear	Unclear	Both	Yes	No
Peinado et al., 2020	Yes	Yes	Not reported	Only databases	Yes	No
Domingues et al., 2020	Yes	Yes	Unclear	Only databases	Yes	No
Barbosa et al., 2020	Yes	Yes	Unclear	Both	Yes	No
Vieira et al., 2020	Yes	Yes	Not reported	Unclear	Yes	Yes
Santos et al., 2020	Yes	Yes	Not reported	Only databases	Yes	No
Macedo et al., 2020	Yes	Yes	Not reported	Unclear	Yes	Yes
Dini et al., 2020	Yes	Yes	Not reported	Not reported	Unclear	Yes
Macena et al., 2020	Yes	Yes	Not reported	Only databases	Yes	Yes
Spessato et al., 2020	Yes	Yes	Not reported	Both	Yes	Yes
Baccaro et al., 2020	Yes	Yes	Only inclusion	Both	Unclear	No
Silva et al., 2020	Yes	Yes	Not reported	Both	Yes	Yes
Linhares et al., 2020	Yes	Yes	Only inclusion	Only databases	No	No
Ribeiro et al., 2020	Yes	Yes	Not reported	Only databases	Yes	No
Bezerra et al., 2020	Yes	Yes	Not reported	Unclear	Yes	Yes
Dias et al., 2020	No	Yes	Not reported	Both	Yes	Yes