

**Annexure 4:** Detailed characteristics of included studies as Domain, Subdomain I and code, Subdomain II and code ( refer to Figure 1 and Table 1 for subdomains and codes), Author and number of reviewers, reference number (as numbered in the reference list of paper), year, journal of publication, language limits, Time limitation, hand/reference searching, grey literature search, number of databases used, number of included studies, Risk of bias tool used for quality assessment and meta-analysis. (Abbreviation Nos.= Numbers, Y= Present, N= Not present). Color codes have been done for different Domains and subdomains (I and II) are as presented in Table 1.

Domain. A. EPIDEMIOLOGIC													
Sub-domain I - Incidence and Prevalence (A1)													
<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Reference number</i>	<i>Year</i>	<i>Journal</i>	<i>Language limitation</i>	<i>Time limitation</i>	<i>Hand/Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>
1	Anatomical and functional characteristics A6	Tannure et al (7)	21	2012	Cleft Palate Craniofac J	N	Y	Y	N	4	6	Cochrane Collaboration's tool	Y
2	Anatomical and functional characteristics A6	Khalaf et al (4)	22	2014	Journal of Orthodontics	N	Y	Y	Y	2	61	STROBE	Y
3	Embryologic development A3	Allagh et al (8)	23	2015	PLoS One	Y	N	Y	N	2	19	STROBE	Y
4	N/A	Wang et al (11)	24	2017	Birth Defects Research	N	Y	N	N	4	41	Previous studies	Y
5	Etiopathogenesis A2	Chen et al (6)	25	2018	Arch. Gynecol. Obstet.	Y	N	Y	Y	4	34	Newcastle–Ottawa Scale	Y
6	N/A	Haseli et al (5)	26	2018	J Mazandaran Univ Med Sci	Y	N	Y	Y	5	17	ROBINS-I	Y
7	Genetics A4	Pereira et al (6)	27	2019	Scientific Reports	Y	Y	N	Y	2	13	STROBE	N
8	N/A	Salari et al (6)	28	2021	J. Stomatol. Oral Maxillofac. Surg.	Y	Y	Y	Y	4	69	STROBE	Y
Sub-domain I - Etiopathogenesis (A2)													
<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Reference number</i>	<i>Year</i>	<i>Journal</i>	<i>Language limit</i>	<i>Time limitation</i>	<i>Hand/Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>
9	Embryologic development A3	Chi et al (4)	29	2010	J Am Acad Dermatol., Cochrane library	N	N	Y	Y	4	7	Newcastle–Ottawa Scale	N
10	Embryologic development A3	Dreier et al (3)	30	2013	PEDIATRICS	N	N	Y	N	3	46	Newcastle–Ottawa Scale	Y
11	Embryologic development A3	Molina-Solana et al (5)	31	2013	Int. J. Oral Maxillofac. Surg.	N	N	Y	Y	5	28	Previous study	Y

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12	Risk assessment and prediction F2	Popoff et al (6)	32	2013	Dentistry 3000	Y	N	Y	N	3	8	STROBE	N
13	Embryologic development A3	Bell et al (6)	33	2014	Paediatr. Perinat. Epidemiol	N	N	Y	N	3	33	Newcastle–Ottawa Scale	Y
14	Embryologic development A3	Luteijn et al (3)	34	2014	Human Reproduction	Y	N	Y	N	2	46	Newcastle–Ottawa scale	Y
15	Genetics A4	Sabbagh et al (5)	35	2014	Cleft Palate Craniofac J	N	N	Y	Y	2	16	Newcastle–Ottawa Scale	Y
16	Embryologic development A3	De-Regil et al (4)	36	2015	The Cochrane Library	N	N	Y	Y	4	30	Cochrane Collaboration’s tool	Y
17	Embryologic development A3	Izedonmwen et al (3)	37	2015	J Oral Maxillofac Res	Y	Y	Y	Y	2	6	Critical Appraisal Skills Programme methodology checklist	Y
18	Embryologic development A3	Sabbagh et al (6)	38	2015	PLoS ONE	N	Y	Y	Y	2	15	Newcastle–Ottawa Scale	Y
19	Embryologic development A3	Tanoshima et al (6)	39	2015	Clin. Pharm. Therap.	N	N	Y	Y	3	59	Newcastle–Ottawa scale	Y
20	Embryologic development A3	Rao et al (4)	40	2016	J Oral Maxillofac Res	Y	Y	Y	Y	2	8	Previous studies	Y
21	Embryologic development A3	Veroniki et al (15)	41	2017	BMC Medicine	N	N	Y	Y	3	93	Cochrane, Newcastle-Ottawa Scale	Y
22	Embryologic development A3	Liang et al (7)	42	2018	Oncotarget	N	N	Y	N	7	16	Newcastle–Ottawa Scale	Y
23	Embryologic development A3	Jayarajan et al (3)	43	2019	Indian J PlastSurg	N	N	N	Y	4	4	Cochrane Collaboration’s tool	N
24	Embryologic development A3	Yin et al (4)	44	2019	Br J Oral Maxillofac Surg.	N	N	Y	Y	3	12	Newcastle–Ottawa Scale	Y
25	Embryologic development A3	Picot et al (6)	45	2020	Birth Defects Research.	N	N	unclear	Y	2	12	ROBINS-I	Y
26	Embryologic development A3	Fell et al (6)	46	2021	Cleft Palate Craniofac J	N	N	Y	N	4	44	Newcastle–Ottawa scale	Y

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27	Health economics E4	Kruppa et al (5)	47	2021	Cleft Palate Craniofac J	Y	Y	Y	N	4	17	Newcastle-Ottawa Scale	N
28	Embryologic development A3	Shi et al (6)	48	2021	Cleft Palate Craniofac J	Y	N	Y	N	2	13	Newcastle Ottawa Scale	Y
29	Psychosocial aspects, perceptions and quality of life of patients with CLP E1	Tran et al (7)	49	2022	Cleft Palate Craniofac J	Y	N	Y	N	5	12	Newcastle-Ottawa scale	Y
<b>Sub-domain I - Genetics A4</b>													
<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Refere nce numbe r</i>	<i>Year</i>	<i>Journal</i>	<i>Language limit</i>	<i>Time limitation</i>	<i>Hand/ Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>
30	Risk assessment and prediction F2	Machado et al (6)	50	2018	Birth Defects Res	N	N	Y	Y	5	11	MAStARI assessment	Y
31	Etiopathogenesis A2	Imani et al (4)	51	2019	International orthodontics	N	N	Y	N	4	4	Newcastle–Ottawa scale	Y
32	Etiopathogenesis A2	Imani et al (4)	52	2019	Int. J. Environ. Res. Public Health	N	N	Y	N	5	10	Newcastle–Ottawa scale	Y
33	Etiopathogenesis A2	Imani et al (5)	53	2019	International Orthodontics	N	N	Y	N	4	4	Newcastle–Ottawa scale	Y
34	Risk assessment and prediction F2	Mendes et al (7)	54	2019	J Oral Pathol Med.	N	N	Y	Y	4	4	QUADAS-2	N
35	Etiopathogenesis A2	Imani et al (7)	55	2021	Life	N	N	Y	N	4	12	Newcastle–Ottawa scale	Y
<b>Sub-domain I - Anatomical and functional characteristics A6</b>													
<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Refere nce numbe r</i>	<i>Year</i>	<i>Journal</i>	<i>Language limit</i>	<i>Time limitation</i>	<i>Hand/ Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>
36	N/A	Antonarakis et al (3)	56	2013	Clin Oral Invest	N	N	N	Y	5	4	Previous studies	Y

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<b>Sub-domain I - Indices of CLP B2</b>													
<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Refere nce numbe r</i>	<i>Year</i>	<i>Journal</i>	<i>Language limit</i>	<i>Time limitation</i>	<i>Hand/ Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>
47	Outcome assessment C15	Altalibi et al (5)	67	2013	Eur J Orthod.	N	N	Y	Y	7	13	QUADAS methodologic assessment tool	N
48	Treatment planning and prediction C1	Buj-Acosta et al (5)	68	2017	PLoS ONE	N	N	Y	Y	4	3	QUADAS tool	N
<b>Sub-domain I - Prenatal diagnosis B3</b>													
<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Refere nce numbe r</i>	<i>Year</i>	<i>Journal</i>	<i>Language limit</i>	<i>Time limitation</i>	<i>Hand/ Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>
49	Conventional radiography and 2D imaging B5	Lai et al (5)	69	2021	J Ultrasound Med	N	Y	Y	N	3	7	QUADAS-2	Y
<b>Sub-domain I - Advanced radiography including 3D imaging and 3D printing B6</b>													
<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Refere nce numbe r</i>	<i>Year</i>	<i>Journal</i>	<i>Language limit</i>	<i>Time limitation</i>	<i>Hand/ Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>
50	Clinical practice guidelines and Core outcome sets G1	van Vlijmen et al (8)	70	2012	JADA	N	N	Y	N	5	50	Previous studies	N
51	Anatomical and functional characteristics A6	Thierens et al (4)	71	2018	J Oral MaxillofacSurg	Y	N	Y	N	4	15	MINORS	N
52	Anatomical and functional characteristics A6	Thierens et al (4)	72	2018	Int. J. Oral Maxillofac. Surg.	Y	N	Y	N	4	33	MINORS	N
<b>Domain. C. THERAPEUTIC</b>													
<b>Sub-domain I -. Feeding and nutrition in patients C2</b>													
<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Refere nce</i>	<i>Year</i>	<i>Journal</i>	<i>Language Limit</i>	<i>Time limitation</i>	<i>Hand/ Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>

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			<i>number</i>								<i>Included studies</i>		
53	Clinical practice guidelines and Core outcome sets G1	Mei et al (3)	73	2009	Evidence-Based Communication Assessment and Intervention	Y	N	N	N	5	14	Cochrane Collaboration's tool	N
<b>Sub-domain I -. Presurgical Infant Orthopaedics and Naso-Alveolar Moulding C3</b>													
<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Reference number</i>	<i>Year</i>	<i>Journal</i>	<i>Language limit</i>	<i>Time limitation</i>	<i>Hand/ Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>
54	Cleft Lip repair C8	Heijden et al (7)	74	2012	Plast. Reconstr. Surg.	Y	N	Y	N	3	12	GRADE	N
55	Outcome assessment C15	Namdar et al (5)	75	2020	Journal of Pediatrics Review	Y	N	Y	N	3	22	Cochrane Collaboration's tool	N
56	Outcome assessment C15	Padovano et al (5)	76	2021	Cleft Palate Craniofac J	Y	N	N	Y	5	12	modified Newcastle-Ottawa scale, Agency for Healthcare Research and Quality (AHRQ) standards, Cochrane collaboration risk of bias tool	Y
<b>Sub-domain I - Orthodontic and Surgical Perspectives of Secondary Alveolar Bone Grafting C5</b>													
<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Reference number</i>	<i>Year</i>	<i>Journal</i>	<i>Language limit</i>	<i>Time limitation</i>	<i>Hand/ Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>
57	Advanced radiography including 3D imaging and 3D printing B6	Mulder et al (5)	77	2019	DentomaxillofacRadiol	Y	N	Y	Y	3	38	MINORS	N

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58	Advanced radiography including 3D imaging and 3D printing B6	Scalzone et al (6)	78	2019	Progress in Orthodontics	N	Y	Y	N	4	4	GRADE	Y
59	Alveolar bone grafting and graft materials C10	Pinheiro et al (5)	79	2020	OrthodCraniofac Res.	N	N	Y	Y	5	19	MINORS	N
60	Outcome assessment C15	Yu et al (3)	80	2020	Oral And Maxillofacial Radiology	N	Y	Y	Y	3	11	MINORS	N
61	Alveolar bone grafting and graft materials C10	Jahanbin et al (5)	81	2021	J Craniofac Surg.	N	N	Y	Y	5	8	Newcastle-Ottawa evaluation (NRCT) and Cochrane Collaboration's tool for RCT	Y
62	Outcome assessment C15	Lacerda-Santos et al (8)	82	2021	Eur. J. Dent.	N	N	Y	Y	5	4	ROBINS-I	N
Sub-domain I - Conventional orthodontics C6													
N os.	Subdomain II and code	Author and number of reviewers (n)	Refere nce numbe r	Year	Journal	Language limit	Time limitation	Hand/ Reference search	Grey literature	Number of databases used	Number of Included studies	Risk of Bias Tool Used/ quality assessment	Meta-analysis
63	Outcome assessment C15	Palikaraki et al (7)	83	2020	Eur J Orthod.	Y	N	Y	Y	5	9	ROBINS-I	Y
64	Outcome assessment C15	Shafaei et al (4)	84	2020	Iran J Ortho.	N	N	Y	Y	3	9	Newcastle-Ottawa Scale	Y
Sub-domain I - Cleft Lip repair C8													
N os.	Subdomain II and code	Author and number of reviewers (n)	Refere nce numbe r	Year	Journal	Language limit	Time limitation	Hand/ Reference search	Grey literature	Number of databases used	Number of Included studies	Risk of Bias Tool Used/ quality assessment	Meta-analysis
65	Effects/Complications of PSIO and PNAM D2	Thierens et al (4)	85	2016	Oral Dis.	Y	N	Y	N	4	15	MINORS	N
66	Outcome assessment C15	Jayarajan et al (3)	86	2018	Cleft Palate Craniofac J	N	N	N	N	4	16	Cochrane Collaboration's tool	N
Sub-domain I - Cleft alveolus, sub-mucous cleft and all types of cleft palate closure/repair C9													

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<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Reference number</i>	<i>Year</i>	<i>Journal</i>	<i>Language limit</i>	<i>Time limitation</i>	<i>Hand/ Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>
67	Effects/Complications of Surgical treatment and/or alveolar bone grafting D4	Salgado et al (6)	87	2019	J Craniomaxillofac Surg	N	N	Y	Y	5	5	Previous study	N
<b>Sub-domain I - Alveolar bone grafting and graft materials C10</b>													
<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Reference number</i>	<i>Year</i>	<i>Journal</i>	<i>Language limit</i>	<i>Time limitation</i>	<i>Hand/ Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>
68	Orthodontic and Surgical Perspectives of Secondary Alveolar Bone Grafting C5	Guo et al (9)	88	2011	The Cochrane Library	N	N	Y	Y	4	2	Cochrane Collaboration's tool and ROBINS-I guidelines	Y
69	Orthodontic and Surgical Perspectives of Secondary Alveolar Bone Grafting C5	Canellas et al (5)	89	2018	Int. J. Oral Maxillofac. Surg.	N	N	Y	Y	5	30	Cochrane Collaboration's tool	Y
70	Orthodontic and Surgical Perspectives of Secondary Alveolar Bone Grafting C5	da Rosa et al (5)	90	2018	Calcif Tissue Int.	Y	N	Y	N	6	10	Cochrane Collaboration's tool	Y
71	Advanced radiography including 3D imaging and 3D printing B6	Kamal et al (8)	91	2018	Br. J. Oral Maxillofac. Surg.	N	N	Y	Y	4	32	MOOSE, STROBE	Y
72	Effects/Complications of Surgical treatment and/or alveolar bone grafting D4	Simpson et al (5)	92	2018	Cleft Palate Craniofac J	Y	N	Y	N	2	12	MINORS	Y



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73	Comprehensive Interdisciplinary care C13	Sales et al (4)	93	2019	Int. J. Oral Maxillofac. Surg.	N	N	Y	Y	3	11	Newcastle-Ottawa Scale	N
74	Cleft alveolus, submucous cleft and all types of cleft palate closure/repair C9	Uribe et al (5)	94	2019	Cleft Palate Craniofac J	Y	N	N	N	6	5	Cochrane Collaboration's tool	N
75	Orthodontic and Surgical Perspectives of Secondary Alveolar Bone Grafting C5	Francisco et al (3)	95	2020	Materials	Y	N	Y	N	4	9	Cochrane Risk of Bias tool and ROBINS-I guidelines	N
76	Presurgical Infant Orthopaedics and Naso-Alveolar Moulding C3	Ma et al (4)	96	2020	J Stomatol Oral Maxillofac Surg	Y	N	unclear	unclear	5	11	MINORS	N
77	Outcome assessment C15	Osorio et al (5)	97	2020	Heliyon	N	N	Y	N	3	15	Cochrane Collaboration's tool	N
78	Outcome assessment C15	Xiao et al (4)	98	2020	J PlastReconstrAesthet	N	N	Y	N	4	9	Newcastle–Ottawa Scale	Y
79	Orthodontic and Surgical Perspectives of Secondary Alveolar Bone Grafting C5	Alkaabi et al (7)	99	2021	J PlastReconstrAesthetSurg	Y	N	N	Y	4	15	Jadad scale and the Delphi list	Y
80	Outcome assessment C15	Carbullido et al (9)	100	2021	Cleft Palate Craniofac J	Y	N	N	N	3	32	Newcastle–Ottawa Scale	N
81	Orthodontic and Surgical Perspectives of Secondary Alveolar Bone Grafting C5	Chetpakdeechit et al (4)	101	2021	Cleft Palate Craniofac J	N	N	N	N	4	23	ROBINS-I	N

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82	Orthodontic and Surgical Perspectives of Secondary Alveolar Bone Grafting C5	Deshpande et al (3)	102	2021	Int J Dentistry Oral Sci.	Y	N	Y	Y	2	3	CONSORT guidelines	N
Sub-domain I - Orthognathic and osteogenic distraction surgical orthodontics C11													
N os.	Subdomain II and code	Author and number of reviewers (n)	Refere nce numbe r	Year	Journal	Language limit	Time limitation	Hand/ Reference search	Grey literature	Number of databases used	Number of Included studies	Risk of Bias Tool Used/ quality assessment	Meta-analysis
83	Outcome assessment C15	Saltaji et al (5)	103	2012	J Oral MaxillofacSurg	N	N	Y	Y	5	10	Previous study	N
84	Outcome assessment C15	Saltaji et al (5)	104	2012	Angle Orthod.	N	N	Y	Y	5	13	Previous study	N
85	Outcome assessment C15	Viwattanatipa et al (3)	105	2015	Orthodontic waves	Y	Y	N	Y	5	12	Previous study	Y
86	Outcome assessment C15	Jiang et al (8)	106	2020	Int. J. Oral Maxillofac. Surg.	Y	N	N	N	4	141	MINORS	Y
Sub-domain I - Other surgical aspects of cleft lip and palate including revisions, scar management, post-operative pain and anaesthesia C12													
N os.	Subdomain II and code	Author and number of reviewers (n)	Refere nce numbe r	Year	Journal	Language limit	Time limitation	Hand/ Reference search	Grey literature	Number of databases used	Number of Included studies	Risk of Bias Tool Used/ quality assessment	Meta-analysis
87	Effects/Complications of Surgical treatment and/or alveolar bone grafting D4	Suresh et al (4)	107	2014	British Journal of Anaesthesia	N	N	Y	N	3	73	modified Jadad five-point quality scale	N
88	Cleft Lip repair C8	Feriani et al (4)	108	2016	The Cochrane Library	N	N	Y	Y	3	8	Cochrane Collaboration's tool	Y
89	Effects/Complications of Surgical treatment and/or alveolar bone grafting D4	Kendall et al (5)	109	2018	Local Reg. Anesth.	N	Y	Y	Y	2	40	Modified Jadad score	N
90	Alveolar bone grafting and graft materials C10	Tache and Mommaerts (2)	110	2019	Int. J. Oral Maxillofac. Surg.	Y	N	Y	N	4	15	MINORS, Cochrane Collaboration's tool	N
91	Cleft alveolus, submucous cleft and all types of cleft palate closure/repair C9	Liu et al (8)	111	2021	BMJ Open	Y	N	Y	Y	6	13	Cochrane Collaboration's tool	Y
Sub-domain I - Management of speech and hearing problems C14													

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<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Refere nce numbe r</i>	<i>Year</i>	<i>Journal</i>	<i>Language limit</i>	<i>Time limitation</i>	<i>Hand/ Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>
92	Cleft alveolus, submucous cleft and all types of cleft palate closure/repair C9	Nasser et al (3)	112	2008	The Cochrane Library	N	N	Y	Y	6	1	Cochrane Collaboration's tool	N
93	N/A	Lee et al (3)	113	2009	The Cochrane Library	N	N	Y	Y	10	1	Cochrane Collaboration's tool	N
94	N/A	Meinusch and Romonath (2)	114	2011	Evidence-Based Communication Assessment and Intervention	Y	N	Y	Y	10	5	Cochrane Collaboration's tool	N
95	N/A	Bessell et al (9)	115	2013	Cleft Palate Craniofac J	N	N	Y	Y	7	17	Cochrane Collaboration's tool	Y
96	Cleft alveolus, submucous cleft and all types of cleft palate closure/repair C9	Gilleard et al (6)	116	2014	Cleft Palate Craniofac J	Y	N	Y	Y	9	26	Previous studies	N
97	Effects/Complications of Surgical treatment and/or alveolar bone grafting D4	Kuo et al (7)	117	2014	PEDIATRICS	N	N	Y	Y	3	9	Previous studies	N
98	N/A	Lane et al (3)	118	2020	Int J Lang CommunDisord.	Y	N	N	Y	6	7	Physiotherapy Evidence Database quality assessment tool (PEDro-P), single-case experimental design (SCED)	N
99	Outcome assessment C15	Sand et al (3)	119	2022	J. Speech Lang. Hear. Re.	Y	N	Y	Y	6	21	ROBINS-I	Y
<b>Sub-domain I - Outcome assessment C15</b>													
<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Refere nce numbe r</i>	<i>Year</i>	<i>Journal</i>	<i>Language limit</i>	<i>Time limitation</i>	<i>Hand/ Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>

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**Annexure 4:** Detailed characteristics of included studies as Domain, Subdomain I and code, Subdomain II and code ( refer to Figure 1 and Table 1 for subdomains and codes), Author and number of reviewers, reference number (as numbered in the reference list of paper), year, journal of publication, language limits, Time limitation, hand/reference searching, grey literature search, number of databases used, number of included studies, Risk of bias tool used for quality assessment and meta-analysis. (Abbreviation Nos.= Numbers, Y= Present, N= Not present). Color codes have been done for different Domains and subdomains (I and II) are as presented in Table 1.

<b>Sub-domain I - Effects/Complications of Surgical treatment and/or alveolar bone grafting D4</b>													
<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Reference number</i>	<i>Year</i>	<i>Journal</i>	<i>Language limit</i>	<i>Time limitation</i>	<i>Hand/Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>
11 1	Cleft alveolus, submucous cleft and all types of cleft palate closure/ repair C9	Hardwicke et al (3)	131	2014	Plast. Reconstr. Surg.	Y	Y	N	N	4	44	RCT- Detsky scale, Nnrct- Methodological Index for Nn-randomized Studies	N
11 2	Cleft alveolus, submucous cleft and all types of cleft palate closure/repair C9	Felton et al (5)	132	2017	AAO-HNSF	N	N	Y	Y	3	6	Oxford Centre for Evidence-Based Medicine levels of evidence, Cochrane Handbook	N
11 3	Cleft alveolus, submucous cleft and all types of cleft palate closure/repair C9	Kappen et al (4)	133	2018	J PlastReconstrAesthetSurg	Y	N	Y	Y	4	17	Newcastle–Ottawa scale, Agency for Health Care Research and Quality (AHRQ)	Y
11 4	Orthognathic and osteogenic distraction surgical orthodontics C11	Liu et al (2)	134	2018	J. Craniofac. Surg.	Y	N	Y	Y	6	9	Previous study	N
11 5	Orthognathic and osteogenic distraction surgical orthodontics C11	Dos Santos Alves et al (6)	135	2019	Int. J. Oral Maxillofac. Surg.	Y	N	Y	N	5	32	Previous study	N
11 6	Cleft alveolus, submucous cleft and all types of cleft palate closure/repair C9	Minatel et al (5)	136	2019	J. Cranio-Maxillo-Fac. Surg.	N	N	N	N	3	13	Newcastle-Ottawa scale	N
11 7	Cleft alveolus, submucous cleft and all types of cleft palate closure/repair C9	Tache and Mommaerts (2)	137	2019	Cleft Palate Craniofac J	N	N	Y	N	4	36	MINORS	N
11 8	Conventional radiography and 2D imaging B4	Corthouts et al (4)	138	2020	PlastAesthet Res	N	Y	Y	Y	2	11	Previous study	N

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119	Other surgical aspects of cleft lip and palate including revisions, scar management, post-operative pain and anaesthesia C12	Miranda et al (5)	139	2020	J Craniofac Surg.	N	N	N	N	4	18	MINORS	N
120	Cleft alveolus, submucous cleft and all types of cleft palate closure/repair C9	Vandenberg et al (4)	140	2020	Cleft Palate Craniofac J	Y	N	Y	N	4	9	Newcastle-Ottawa scale	Y
121	Orthognathic and osteogenic distraction surgical orthodontics C11	Velasquese al (5)	141	2020	Oral and Maxillofacial Surgery	Y	N	Y	Y	3	10	PRISMA	N
122	Cleft Lip repair C8	Egbunah et al (6)	142	2021	Cleft Palate Craniofac J	Y	N	Y	Y	2	6	Previous study	Y
123	Orthognathic and osteogenic distraction surgical orthodontics C11	Valls-Ontanon et al (4)	143	2021	Journal of Cranio-Maxillo-Facial Surgery	Y	N	Y	Y	2	29	Previous study, GRADE	Y
<b>Sub-domain I - Oral health aspects including dental caries and other dental problems D6</b>													
<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Refere nce numbe r</i>	<i>Year</i>	<i>Journal</i>	<i>Language limit</i>	<i>Time limitation</i>	<i>Hand/ Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>
124	N/A	Worth et al (6)	144	2017	British Dental Journal	N	N	Y	Y	10	24	Previous study (Agbaje et al)	Y
125	Conventional orthodontics C6	Vale et al (5)	145	2021	Int J Dent Hygiene.	Y	N	N	N	5	2	ROBINS-I	Y
<b>Domain. E. PSYCHOSOCIAL ASPECTS, PERCEPTIONS AND QUALITY OF LIFE</b>													
<b>Sub-domain I - Psychosocial aspects, perceptions and quality of life of family members of the patients with CLP, lay people and healthcare professionals E1</b>													
<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Refere nce numbe r</i>	<i>Year</i>	<i>Journal</i>	<i>Language limit</i>	<i>Time limitation</i>	<i>Hand/ Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>
126	N/A	Zhu et al (3)	146	2016	Cleft Palate Craniofac J	N	N	Y	N	5	11	Previous study	N

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127	Presurgical Infant Orthopaedics and Naso-Alveolar Moulding C3	El-Ghafour et al (5)	147	2020	Maced J Med Sci	Y	N	Y	Y	7	1	Cochrane Collaboration's tool	N
128	Feeding and nutrition in patients C2	Srivastav et al (6)	148	2021	Spec Care Dentist.	N	N	Y	Y	5	8	JBIC	N
<b>Sub-domain I - Psychosocial aspects, perceptions and quality of life of patients with CLP E2</b>													
<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Reference number</i>	<i>Year</i>	<i>Journal</i>	<i>Language limit</i>	<i>Time limitation</i>	<i>Hand/Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>
129	N/A	Antonarakis et al (3)	149	2013	Community Dent. Health	N	N	Y	Y	6	3	Cochrane Collaboration's tool	N
130	N/A	Herkath et al (4)	150	2015	Cleft Palate Craniofac J	Y	N	Y	N	8	23	STROBE	Y
131	N/A	Chung et al (5)	151	2019	PlastReconstrSurg Glob Open	Y	Y	Y	Y	3	15	Joanna Briggs Institute (JBI) checklist	N
132	Other surgical aspects of cleft lip and palate including revisions, scar management, post-operative pain and anaesthesia C12	Acum et al (6)	152	2020	Cleft Palate Craniofac J	Y	N	Y	N	5	22	tailored version of the SIGN-50 rating tool	N
133	Anatomical and functional characteristics A6	Glinianaia et al (6)	153	2021	Birth Defects Research	Y	N	Y	Y	5	39	Newcastle–Ottawa Scale (modified)	Y
134	Conventional orthodontics C6	Nascimento et al (5)	154	2021	Eur J Orthod.	N	N	Y	Y	6	13	Fowkes and Fulton qualifier	Y
<b>Sub-domain I - Burden of care E3</b>													
<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Reference number</i>	<i>Year</i>	<i>Journal</i>	<i>Language limit</i>	<i>Time limitation</i>	<i>Hand/Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>
135	Presurgical Infant Orthopaedics and Naso-Alveolar Moulding C3	Alfonso et al (8)	c	2020	Cleft Palate Craniofac J	Y	N	N	N	5	29	Cochrane risk-of-bias, ROBINS-I Scale, CLARITY Group Risk of Bias Instrument	N

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Sub-domain I - Health economics E4													
N os.	Subdomain II and code	Author and number of reviewers (n)	Refere nce numbe r	Year	Journal	Language limit	Time limitation	Hand/ Reference search	Grey literature	Number of databases used	Number of Included studies	Risk of Bias Tool Used/ quality assessment	Meta-analysis
136	Burden of care E3	Saxton et al (7)	156	2016	PLoS One	Y	Y	Y	Y	3	86	Previous study	N
Domain F. PREVENTIVE													
Sub-domain I - Risk assessment and prediction F2													
N os.	Subdomain II and code	Author and number of reviewers (n)	Refere nce numbe r	Year	Journal	Language limit	Time limitation	Hand/ Reference search	Grey literature	Number of databases used	Number of Included studies	Risk of Bias Tool Used/ quality assessment	Meta-analysis
137	Genetics A4	Zhao et al (8)	157	2016	F1000Research	N	N	Y	Y	5	10	CONSORT, STROBE	Y
138	Genetics A4	Wang et al (7)	158	2018	Bioscience Reports	N	N	Y	N	6	7	Newcastle–Ottawa scale	Y
139	Genetics A4	Shu et al (3)	159	2019	Br J Oral Maxillofac Surg.	N	N	Y	N	3	34	Newcastle-Ottawa scale	Y
140	Genetics A4	Zhou et al (7)	160	2020	Birth Defects Research	N	Y	Y	Y	4	56	Newcastle-Ottawa scale and Cochrane's risk of bias tool.	Y
Domain. G. RESEARCH METHODS													
Sub-domain I - Clinical practice guidelines and Core outcome sets G1													
N os.	Subdomain II and code	Author and number of reviewers (n)	Refere nce numbe r	Year	Journal	Language limit	Time limitation	Hand/ Reference search	Grey literature	Number of databases used	Number of Included studies	Risk of Bias Tool Used/ quality assessment	Meta-analysis
141	Oral health aspects including dental caries and other dental problems D6	Saikia et al (10)	161	2021	Cleft Palate Craniofac J	N	N	Y	Y	6	7	AGREE II	N
Sub-domain I - Methodological aspects G3													



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<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Refere nce numbe r</i>	<i>Year</i>	<i>Journal</i>	<i>Language limit</i>	<i>Time limitation</i>	<i>Hand/ Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>
142	N/A	Hardwicke et al (3)	162	2017	Cleft Palate Craniofac J	Y	Y	N	N	3	65	CONSORT guidelines	N
Domain. H. RECENT ADVANCES													
Sub-domain I - Any recent research area not covered in the above categorization H1													
<i>N os.</i>	<i>Subdomain II and code</i>	<i>Author and number of reviewers (n)</i>	<i>Refere nce numbe r</i>	<i>Year</i>	<i>Journal</i>	<i>Language limit</i>	<i>Time limitation</i>	<i>Hand/ Reference search</i>	<i>Grey literature</i>	<i>Number of databases used</i>	<i>Number of Included studies</i>	<i>Risk of Bias Tool Used/ quality assessment</i>	<i>Meta-analysis</i>
143	Alveolar bone grafting and graft materials C10	Shanbhag et al (6)	163	2019	J Clin Periodontol	N	N	Y	Y	3	77	Cochrane	Y
144	Genetics A4	Wei et al (6)	164	2022	Archives of Oral Biology	Y	N	N	N	4	16	Newcastle–Ottawa Scale	N