

Bilaga 31 Exkluderade studier och studier med hög risk för bias för TÅ-par 38–41 samt 86–87

Vetenskapligt underlag till Socialstyrelsens nationella riktlinjer för tandvården

Rapport nr 334

Appendix 31 Excluded studies and studies with high risk of bias for TÅ-par 38–41 and 86–87

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This list consists of articles not included in SBU's report. It has two parts:

Excluded studies

This part consists of articles considered relevant in terms of abstract, but the full-text articles were considered to be irrelevant to the research question and other inclusion criteria, after assessment.

Studies with high risk of bias

This part consists of articles that were relevant in terms of abstract and full-text, but after quality assessment considered to be studies with high risk of bias.

Excluded studies

Reference	Main reason for exclusion
Ali AH, Koller G, Foschi F, Andiappan M, Bruce KD, Banerjee A, et al. Self-Limiting versus Conventional Caries Removal: A Randomized Clinical Trial. <i>Journal of Dental Research</i> 2018;97:1207-1213.	Not relevant
Alleman DS, Magne P. A systematic approach to deep caries removal end points: the peripheral seal concept in adhesive dentistry. <i>Quintessence International</i> 2012;43:197-208.	Wrong study design
Allen PF, Da Mata C, Hayes M. Minimal intervention dentistry for partially dentate older adults. <i>Gerodontology</i> 2019.	Wrong study design
Alsadat FA, El-Housseiny AA, Alamoudi NM, Alnowaiser AM. Conservative treatment for deep carious lesions in primary and young permanent teeth. <i>Nigerian Journal of Clinical Practice</i> 2018;21:1549-1556.	Wrong study design
Anonymous. Evidenced-based review of clinical studies on indirect pulp capping. <i>Journal of Endodontics</i> 2009;35:1147-51.	Wrong study design
Arrow P, Klobas E. Minimal intervention dentistry for early childhood caries and child dental anxiety: a randomized controlled trial. <i>Australian Dental Journal</i> 2017;62:200-207.	Not relevant
Arrow P, Klobas E. Minimum intervention dentistry approach to managing early childhood caries: a randomized control trial. <i>Community Dentistry & Oral Epidemiology</i> 2015;43:511-20.	Not relevant
Arrow P. Restorative Outcomes of a Minimally Invasive Restorative Approach Based on Atraumatic Restorative Treatment to Manage Early Childhood Caries: A Randomised Controlled Trial. <i>Caries Research</i> 2016;50:1-8.	Not relevant
Bader JD, Shugars DA. The evidence supporting alternative management strategies for early occlusal caries and suspected occlusal dentinal caries. <i>The Journal of Evidencebased Dental Practice</i> 2006;6:91-100.	Wrong study design
Bakhshandeh A, Qvist V, Ekstrand KR. Sealing occlusal caries lesions in adults referred for restorative treatment: 2-3 years of follow-up. <i>Clinical Oral Investigations</i> 2012;16:521-9.	Not relevant
Banerjee A. The art and science of minimal intervention dentistry and atraumatic restorative treatment. <i>Br Dent J</i> 2018;224:922.	Wrong study design
Bergenholtz G, Axelsson S, Davidson T, Frisk F, Hakeberg M, Kvist T, et al. Treatment of pulps in teeth affected by deep caries - A systematic review of the literature. <i>Singapore Dental Journal</i> 2013;34:1-12.	Wrong study design

- Bitello-Firmino L, Soares VK, Dame-Teixeira N, Parolo CCF, Maltz M. Microbial Load After Selective and Complete Caries Removal in Permanent Molars: a Randomized Clinical Trial. *Brazilian Dental Journal* 2018;29:290-295. Not relevant
- Bjorndal L, Bruun G, Markvart M, Kjaeldgaard M, Nasman P, Thordrup M. Randomised clinical trial on deep caries excavation 3-5 yr follow up. Proceedings of the general session of the international association for dental research; 2012, jun 20-23; iguacu falls, brazil 2012:Abstract no: 3032. Wrong study design
- Bjorndal L. In deep cavities stepwise excavation of caries can preserve the pulp. *Evidence-Based Dentistry* 2011;12:68. Wrong study design
- Bjorndal L. Indirect pulp therapy and stepwise excavation. *Pediatric Dentistry* 2008;30:225-9. Wrong study design
- Bjorndal L. Reentry may not be needed after partial caries removal in mainly young permanent molars with caries involving half or more of the dentin thickness. *Journal of evidence-based dental practice* 2013;13:62-63. Wrong study design
- Brignardello-Petersen R. Age and time of successive appointment seem to be associated with the success of stepwise excavation procedures. *J Am Dent Assoc* 2018;149:e160. Wrong study design
- Browning WD. Critical appraisal. 2015 Update: Approaches to Caries Removal. *Journal of Esthetic & Restorative Dentistry: Official Publication of the American Academy of Esthetic Dentistry* 2015;27:383-96. Duplicate
- Carvalho JC, Dige I, Machiulskiene V, Qvist V, Bakhshandeh A, Fatturi-Parolo C, et al. Occlusal Caries: Biological Approach for Its Diagnosis and Management. *Caries Research* 2016;50:527-542. Wrong study design
- Chalmers JM. Minimal intervention dentistry: part 1. Strategies for addressing the new caries challenge in older patients. *Journal (Canadian Dental Association)* 2006;72:427-33. Wrong study design
- Chompu-inwai P, Boonsongsawat K, Sastraruji T, Sophasri T, Mankaen S, Nondon S, et al. Three Incomplete Caries Removal Techniques Compared Over Two Years in Primary Molars with Asymptomatic Deep Caries or Reversible Pulpitis. *Pediatric Dentistry* 2015;37:41-8. Not relevant
- Chu CH, Lo EC. A review of sodium fluoride varnish. *General Dentistry* 2006;54:247-53. Wrong study design
- Crystal YO, Janal MN, Hamilton DS, Niederman R. Parental perceptions and acceptance of silver diamine fluoride staining. *Journal of the American Dental Association* 2017;148:510-518.e4. Not relevant

Da Mata CM, Allen F, Woods N. Atraumatic restorative treatment and conventional restorations: a cost-effectiveness analysis. Proceedings of the 89th general session of the international association for dental research; 2011, MAR 16-19; san diego, california, united states 2011:Abstract no: 1602.	Not relevant
Dalpian DM, Gallina CS, Nicoloso GF, Correa MB, Garcia-Godoy F, Araujo FB, et al. Patient- and treatment-related factors may influence the longevity of primary teeth restorations in high caries-risk children: A university-based retrospective study. American Journal of Dentistry 2018;31:261-266.	Not relevant
de Amorim RG, Leal SC, Mulder J, Creugers NH, Frencken JE. Amalgam and ART restorations in children: a controlled clinical trial. Clinical Oral Investigations 2014;18:117-24.	Not relevant
de Menezes Abreu DM, Leal SC, Frencken JE. Self-report of pain in children treated according to the atraumatic restorative treatment and the conventional restorative treatment--a pilot study. Journal of Clinical Pediatric Dentistry 2009;34:151-5.	Wrong study design
de Menezes Abreu DM, Leal SC, Mulder J, Frencken JE. Dental anxiety in 6-7-year-old children treated in accordance with conventional restorative treatment, ART and ultra-conservative treatment protocols. Acta Odontologica Scandinavica 2011;69:410-6.	Not relevant
de Menezes Abreu DM, Leal SC, Mulder J, Frencken JE. Pain experience after conventional, atraumatic, and ultraconservative restorative treatments in 6- to 7-yr-old children. European Journal of Oral Sciences 2011;119:163-8.	Not relevant
Deng Y, Feng G, Hu B, Kuang Y, Song J. Effects of Papacarie on children with dental caries in primary teeth: a systematic review and meta-analysis. International Journal of Paediatric Dentistry 2018;28:361-372.	Not relevant
Domejean S, Ducamp R, Leger S, Holmgren C. Resin infiltration of non-cavitated caries lesions: a systematic review. Medical Principles & Practice 2015;24:216-21.	Not relevant
Domejean S, Grosogeat B. Evidence-Based Deep Carious Lesion Management: From Concept to Application in Everyday Clinical Practice. Monogr Oral Sci 2018;27:137-145.	Wrong study design
Dorri M, Sheiham A, Marinho VCC. Atraumatic restorative treatment versus conventional restorative treatment for the management of dental caries. Cochrane Database of Systematic Reviews 2009.	Wrong study design

Duangthip D, Jiang M, Chu CH, Lo EC. Restorative approaches to treat dentin caries in preschool children: systematic review. <i>European Journal of Paediatric Dentistry</i> 2016;17:113-21.	Wrong study design
Eden E, Topaloglu-Ak A, Frencken JE, van't Hof M. Survival of self-etch adhesive Class II composite restorations using ART and conventional cavity preparations in primary molars. <i>American Journal of Dentistry</i> 2006;19:359-63.	Not relevant
Farag A, van der Sanden WJ, Abdelwahab H, Mulder J, Frencken JE. 5-Year survival of ART restorations with and without cavity disinfection. <i>Journal of Dentistry</i> 2009;37:468-74.	Not relevant
Faustino-Silva DD, Figueiredo MC. Atraumatic restorative treatment-ART in early childhood caries in babies: 4 years of randomized clinical trial. <i>Clinical Oral Investigations</i> 2019;21:21.	Not relevant
Ferreira JM, Pinheiro SL, Sampaio FC, de Menezes VA. Caries removal in primary teeth--a systematic review. <i>Quintessence International</i> 2012;43:e9-15.	Wrong study design
Foley J, Evans D, Blackwell A. Partial caries removal and cariostatic materials in carious primary molar teeth: a randomised controlled clinical trial. <i>British Dental Journal</i> 2004;197:697-701; discussion 689.	Not relevant
Foley J. Alternative treatment strategies for carious primary teeth: an overview of the evidence. <i>European Archives of Paediatric Dentistry: Official Journal of the European Academy of Paediatric Dentistry</i> 2006;7:73-80.	Not relevant
Fontana M. Limited evidence for main reason for failure of partially excavated and restored teeth. <i>Evidence-Based Dentistry</i> 2014;15:16-7.	Wrong study design
Franzon R, Opdam NJ, Guimaraes LF, Demarco FF, Casagrande L, Haas AN, et al. Randomized controlled clinical trial of the 24-months survival of composite resin restorations after one-step incomplete and complete excavation on primary teeth. <i>Journal of Dentistry</i> 2015;43:1235-41.	Duplicate
Frencken JE, Holmgren CJ. Caries management through the Atraumatic Restorative Treatment (ART) approach and glass-ionomers: update 2013. <i>Pesquisa Odontologica Brasileira = Brazilian Oral Research</i> 2014;28:5-8.	Not relevant
Frencken JE, Leal SC, Navarro MF. Twenty-five-year atraumatic restorative treatment (ART) approach: a comprehensive overview. <i>Clinical Oral Investigations</i> 2012;16:1337-46.	Wrong study design

- Frencken JE, Taifour D, van 't Hof MA. Survival of ART and amalgam restorations in permanent teeth of children after 6.3 years. *Journal of Dental Research* 2006;85:622-6. Not relevant
- Frencken JE, Van 't Hof MA, Van Amerongen WE, Holmgren CJ. Effectiveness of single-surface ART restorations in the permanent dentition: a meta-analysis. *Journal of Dental Research* 2004;83:120-3. Not relevant
- Frencken JE, van't Hof MA, Taifour D, Al-Zaher I. Effectiveness of ART and traditional amalgam approach in restoring single-surface cavities in posterior teeth of permanent dentitions in school children after 6.3 years. *Community Dentistry & Oral Epidemiology* 2007;35:207-14. Not relevant
- Gao W, Peng D, Smales RJ, Yip KH. Comparison of atraumatic restorative treatment and conventional restorative procedures in a hospital clinic: evaluation after 30 months. *Quintessence International* 2003;34:31-7. Not relevant
- Giacaman RA, Munoz-Sandoval C, Neuhaus KW, Fontana M, Chalas R. Evidence-based strategies for the minimally invasive treatment of carious lesions: Review of the literature. *Advances in Clinical & Experimental Medicine* 2018;27:1009-1016. Wrong study design
- Goud RS, Nagesh L, Shoba F, Raju HG. Assessment of Discomfort Experienced by School Children While Performing 'ART' and 'MCP'-An Experimental Study. *Journal of Dentistry / Tehran University of Medical Sciences* 2012;9:229-37. Not relevant
- Hayashi M, Fujitani M, Yamaki C, Momoi Y. Ways of enhancing pulp preservation by stepwise excavation--a systematic review. *Journal of Dentistry* 2011;39:95-107. Wrong study design
- Hayes M, Allen E, da Mata C, McKenna G, Burke F. Minimal intervention dentistry and older patients. Part 1: Risk assessment and caries prevention. *Dental Update* 2014;41:406-8, 411-2. Wrong study design
- Heinrich R, Kneist S. Microbiological-histological controlled treatment study for evaluation of efficacy of one step and stepwise excavation of deep carious lesions. *Stomatologie der DDR* 1988;38:693-698. Not relevant
- Hoefler V, Nagaoka H, Miller CS. Long-term survival and vitality outcomes of permanent teeth following deep caries treatment with step-wise and partial-caries-removal: A Systematic Review. *Journal of Dentistry* 2016;54:25-32. Wrong study design
- Honkala E, Behbehani J, Ibricevic H, Kerosuo E, Al-Jame G. The atraumatic restorative treatment (ART) approach to restoring primary teeth in a standard dental clinic. *International Journal of Paediatric Dentistry* 2003;13:172-9. Not relevant

Hurst D. Poor quality evidence suggests that failure rates for atraumatic restorative treatment and conventional amalgam are similar. Evidence-Based Dentistry 2012;13:46-7.	Not relevant
Innes NP, Evans DJ, Stirrups DR. Sealing caries in primary molars: randomized control trial, 5-year results. Journal of Dental Research 2011;90:1405-10.	Not relevant
Kalf-Scholte SM, van Amerongen WE, Smith AJ, van Haastrecht HJ. Atraumatic restorative treatment (ART): a three-year clinical study in Malawi--comparison of conventional amalgam and ART restorations. Journal of Public Health Dentistry 2003;63:99-103.	Not relevant
Kemoli AM. Dilemma of Managing Multi-Surface Dental Caries in the Primary Dentition Using the Atraumatic Restorative Treatment: Renaissance or Dimming Hope. East African Medical Journal 2012;89:224-9.	Not relevant
Leal S, Bonifacio C, Raggio D, Frencken J. Atraumatic Restorative Treatment: Restorative Component. Monogr Oral Sci 2018;27:92-102.	Wrong study design
Leal SC, Bronkhorst EM, Fan M, Frencken JE. Effect of different protocols for treating cavities in primary molars on the quality of life of children in Brazil--1 year follow-up. International Dental Journal 2013;63:329-35.	Not relevant
Li T, Zhai X, Song F, Zhu H. Selective versus non-selective removal for dental caries: a systematic review and meta-analysis. Acta Odontologica Scandinavica 2018;76:135-140.	Wrong study design
Louw AJ, Sarvan I, Chikte U. Evaluation of atraumatic restorative treatment (ART) and minimal intervention treatment (MIT). Journal of dental research 2001;80.	Wrong study design
Louw AJ, Sarvan I, Chikte UM, Honkala E. One-year evaluation of atraumatic restorative treatment and minimum intervention techniques on primary teeth. SADJ 2002;57:366-71.	Not relevant
Lula EC, Almeida LJ, Jr., Alves CM, Monteiro-Neto V, Ribeiro CC. Partial caries removal in primary teeth: association of clinical parameters with microbiological status. Caries Research 2011;45:275-80.	Not relevant
Lula EC, Monteiro-Neto V, Alves CM, Ribeiro CC. Microbiological analysis after complete or partial removal of carious dentin in primary teeth: a randomized clinical trial. Caries Research 2009;43:354-8.	Not relevant
Magnusson BO, Sundell SO. Stepwise excavation of deep carious lesions in primary molars. Journal of the International Association of Dentistry for Children 1977;8:36-40.	Not relevant
Maltz M, Alves LS, Jardim JJ, Moura Mdos S, de Oliveira EF. Incomplete caries removal in deep lesions: a 10-year prospective study. American Journal of Dentistry 2011;24:211-4.	Not relevant

- Maltz M, Alves LS. Incomplete caries removal significantly reduces the risk of pulp exposure and post-operative pulpal symptoms. *The Journal of Evidencebased Dental Practice* 2013;13:120-2. Not relevant
- Maltz M, Garcia R, Jardim JJ, de Paula LM, Yamaguti PM, Moura MS, et al. Randomized trial of partial vs. stepwise caries removal: 3-year follow-up. *Journal of Dental Research* 2012;91:1026-31. Not relevant
- Maltz M, Henz SL, de Oliveira EF, Jardim JJ. Conventional caries removal and sealed caries in permanent teeth: a microbiological evaluation. *Journal of Dentistry* 2012;40:776-82. Not relevant
- Maltz M, Jardim JJ, Mestrinho HD, Yamaguti PM, Podesta K, Moura MS, et al. Partial removal of carious dentine: a multicenter randomized controlled trial and 18-month follow-up results. *Caries Research* 2013;47:103-9. Duplicate
- Mandari GJ, Truin GJ, van't Hof MA, Frencken JE. Effectiveness of three minimal intervention approaches for managing dental caries: survival of restorations after 2 years. *Caries Research* 2001;35:90-94. Not relevant
- Manton D. Partial caries removal may have advantages but limited evidence on restoration survival. *Evidence-Based Dentistry* 2013;14:74-5. Wrong study design
- Mello B, T CS, Vitor L, Rios D, Silva T, Machado M, et al. Evaluation of Dentin-Pulp Complex Response after Conservative Clinical Procedures in Primary Teeth. *Int J Clin Pediatr Dent* 2018;11:188-192. Not relevant
- Menezes Abreu DM, Leal SC, Frencken JE. Self-report of pain in children treated according to the atraumatic restorative treatment and the conventional restorative treatment: a pilot study. *Journal of clinical pediatric dentistry* 2010;34:151-155. Wrong study design
- Menezes-Silva R, Velasco SRM, Bastos RS, Molina G, Honorio HM, Frencken JE, et al. Randomized clinical trial of class II restoration in permanent teeth comparing ART with composite resin after 12 months. *Clinical Oral Investigations* 2019;6:06. Not relevant
- Mertz-Fairhurst EJ, Smith CD, Williams JE, Sherrer JD, Mackert JR, Jr., Richards EE, et al. Cariostatic and ultraconservative sealed restorations: six-year results. *Quintessence International* 1992;23:827-38. Not relevant
- Mhaville RJ, van Amerongen WE, Mandari GJ. Residual caries and marginal integrity in relation to Class II glass ionomer restorations in primary molars. *European Archives of Paediatric Dentistry: Official Journal of the European Academy of Paediatric Dentistry* 2006;7:81-4. Wrong study design

Mickenautsch S, Yengopal V, Banerjee A. Atraumatic restorative treatment versus amalgam restoration longevity: a systematic review. <i>Clinical Oral Investigations</i> 2010;14:233-40.	Wrong study design
Mijan M, de Amorim RG, Leal SC, Mulder J, Oliveira L, Creugers NHJ, et al. The 3.5-year survival rates of primary molars treated according to three treatment protocols: a controlled clinical trial. <i>Clinical Oral Investigations</i> 2014;18:1061-1069.	Not relevant
Miranda L. Randomized controlled clinical study comparing atraumatic restorative treatment with conventional amalgam treatment in primary molars: evaluation after 6 and 12 months. 2005.	Not relevant
Molina GF, Faulks D, Mazzola I, Cabral RJ, Mulder J, Frencken JE. Three-year survival of ART high-viscosity glass-ionomer and resin composite restorations in people with disability. <i>Clinical Oral Investigations</i> 2018;22:461-467.	Not relevant
Molina GF, Faulks D, Mazzola I, Mulder J, Frencken JE. One year survival of ART and conventional restorations in patients with disability. <i>BMC Oral Health</i> 2014;14:49.	Not relevant
Nct. Comparison of Conventional Versus Conservative Caries Removal in Primary Teeth. https://clinicaltrials.gov/show/nct03650647 2018.	Not relevant
Nct. Effectiveness of Silver Diamine Fluoride in Arresting Dental Caries. https://clinicaltrials.gov/show/nct03063307 2017.	Not relevant
Nct. Management of Occlusal Dentinal Caries in Deciduous Molars. https://clinicaltrials.gov/show/nct03552835 2018.	Not relevant
Nct. The CAP-1 Trial: stepwise Excavation Versus One Completed Excavation in Deep Caries. https://clinicaltrials.gov/show/nct00187837 2005.	Not relevant
Olegario IC, Hesse D, Bonecker M, Imparato JC, Braga MM, Mendes FM, et al. Effectiveness of conventional treatment using bulk-fill composite resin versus Atraumatic Restorative Treatments in primary and permanent dentition: a pragmatic randomized clinical trial. <i>BMC Oral Health</i> 2016;17:34.	Wrong study design
Orhan AI, Oz FT, Ozcelik B, Orhan K. A clinical and microbiological comparative study of deep carious lesion treatment in deciduous and young permanent molars. <i>Clinical Oral Investigations</i> 2008;12:369-78.	Not relevant
Page LA. Caries management: is the "seal the deal"? <i>Annals of the Royal Australasian College of Dental Surgeons</i> 2012;21:53-5.	Wrong study design
Phonghanyudh A, Phantumvanit P, Songpaisan Y, Petersen PE. Clinical evaluation of three caries removal approaches in primary teeth: a randomised controlled trial. <i>Community Dental Health</i> 2012;29:173-8.	

Raggio DP, Hesse D, Lenzi TL, Guglielmi CA, Braga MM. Is Atraumatic restorative treatment an option for restoring occlusoproximal caries lesions in primary teeth? A systematic review and meta-analysis. <i>International Journal of Paediatric Dentistry</i> 2013;23:435-43.	Not relevant
Rahimtoola S, van Amerongen E, Maher R, Groen H. Pain related to different ways of minimal intervention in the treatment of small caries lesions. <i>Journal of Dentistry for Children</i> 2000;67:123-7, 83.	Not relevant
Rahimtoola S, van Amerongen E. Comparison of two tooth-saving preparation techniques for one-surface cavities. <i>Journal of Dentistry for Children</i> 2002;69:16-26, 11.	Not relevant
Reichert C. Randomized trial of partial vs. stepwise caries removal: 3-year follow-up. <i>Journal of Orofacial Orthopedics</i> 2013;8:08.	Wrong study design
Ribeiro CC, de Oliveira Lula EC, da Costa RC, Nunes AM. Rationale for the partial removal of carious tissue in primary teeth. <i>Pediatric Dentistry</i> 2012;34:39-41.	Wrong study design
Ricketts D, Innes N, Schwendicke F. Selective Removal of Carious Tissue. <i>Monogr Oral Sci</i> 2018;27:82-91.	Wrong study design
Ricketts D. Deep or partial caries removal: which is best? <i>Evidence-Based Dentistry</i> 2008;9:71-2.	Wrong study design
Ricketts DN, Kidd EA, Innes N, Clarkson J. Complete or ultraconservative removal of decayed tissue in unfilled teeth. <i>Cochrane Database of Systematic Reviews</i> 2006:CD003808.	Wrong study design
Rios Caro TE, Aguilar AAA, Saavedra JH, Alfaya TA, Franca CM, Fernandes KP, et al. Comparison of operative time, costs, and self-reported pain in children treated with atraumatic restorative treatment and conventional restorative treatment. <i>Clinical and Experimental Medical Letters</i> 2012;53:159-163.	Not relevant
Robinson C. Filling without drilling. <i>Journal of Dental Research</i> 2011;90:1261-3.	Wrong study design
Ruengrungsom C, Palamara JEA, Burrow MF. Comparison of ART and conventional techniques on clinical performance of glass-ionomer cement restorations in load bearing areas of permanent and primary dentitions: A systematic review. <i>Journal of Dentistry</i> 2018;78:1-21.	Wrong study design
Santamaria R, Innes N. Trial shows partial caries removal is an effective technique in primary molars. <i>Evidence-Based Dentistry</i> 2014;15:81-2.	Not relevant
Santamaria RM, Innes NP, Machiulskiene V, Evans DJ, Alkilzy M, Splieth CH. Acceptability of different caries management methods for primary molars in a RCT. <i>International Journal of Paediatric Dentistry</i> 2015;25:9-17.	Not relevant

Santamaria RM, Innes NP, Machiulskiene V, Evans DJ, Splieth CH. Caries management strategies for primary molars: 1-yr randomized control trial results. <i>Journal of Dental Research</i> 2014;93:1062-9.	Not relevant
Santamaria RM, Innes NPT, Machiulskiene V, Schmoeckel J, Alkilzy M, Splieth CH. Alternative Caries Management Options for Primary Molars: 2.5-Year Outcomes of a Randomised Clinical Trial. <i>Caries Research</i> 2017;51:605-614.	Not relevant
Sarvan I. Atraumatic restorative treatment and minimal Intervention treatment techniques: evaluation after 1-Year. <i>Journal of dental research</i> 2001;80:1361, Abstract No: 3.	Wrong study design
Schriks MC, van Amerongen WE. Atraumatic perspectives of ART: psychological and physiological aspects of treatment with and without rotary instruments. <i>Community Dentistry & Oral Epidemiology</i> 2003;31:15-20.	Not relevant
Schwendicke F, Dorfer CE, Paris S. Incomplete caries removal: a systematic review and meta-analysis. <i>Journal of Dental Research</i> 2013;92:306-14.	Wrong study design
Schwendicke F, Frencken J, Innes N. Clinical Recommendations on Carious Tissue Removal in Cavitated Lesions. <i>Monogr Oral Sci</i> 2018;27:162-166.	Wrong study design
Schwendicke F, Frencken JE, Bjorndal L, Maltz M, Manton DJ, Ricketts D, et al. Managing Carious Lesions: Consensus Recommendations on Carious Tissue Removal. <i>Advances in Dental Research</i> 2016;28:58-67.	Wrong study design
Schwendicke F, Jager AM, Paris S, Hsu LY, Tu YK. Treating pit-and-fissure caries: a systematic review and network meta-analysis. <i>Journal of Dental Research</i> 2015;94:522-33.	Wrong study design
Schwendicke F, Krois J, Splieth CH, Innes N, Robertson M, Schmoeckel J, et al. Cost-effectiveness of managing cavitated primary molar caries lesions: A randomized trial in Germany. <i>Journal of Dentistry</i> 2018;78:40-45.	Not relevant
Schwendicke F, Meyer-Lueckel H, Dorfer C, Paris S. Failure of incompletely excavated teeth--a systematic review. <i>Journal of Dentistry</i> 2013;41:569-80.	Wrong study design
Schwendicke F, Mostajaboldave R, Otto I, Dorfer CE, Burkert S. Patients' preferences for selective versus complete excavation: A mixed-methods study. <i>Journal of Dentistry</i> 2016;46:47-53.	Wrong study design
Schwendicke F, Paris S, Schweigel H. Treatment of deep caries lesions: A multi-center randomised controlled trial using a comprehensive set of outcome parameters. <i>Trials</i> 2015;16.	Wrong study design
Schwendicke F, Paris S, Stolpe M. Cost-effectiveness of caries excavations in different risk groups - a micro-simulation study. <i>BMC Oral Health</i> 2014;14:153.	Not relevant

Schwendicke F, Paris S, Tu YK. Effects of using different criteria for caries removal: a systematic review and network meta-analysis. <i>Journal of Dentistry</i> 2015;43:1-15.	Wrong study design
Schwendicke F, Schweigel H, Petrou MA, Santamaria R, Hopfenmuller W, Finke C, et al. Selective or stepwise removal of deep caries in deciduous molars: study protocol for a randomized controlled trial. <i>Trials [Electronic Resource]</i> 2015;16:11.	Not relevant
Schwendicke F, Walsh T, Fontana M, Bjørndal L, Clarkson JE, Lamont T, et al. Interventions for treating cavitated or dentine carious lesions. <i>Cochrane Database of Systematic Reviews</i> 2018.	Wrong study design
Simon AK, Bhumika TV, Nair NS. Does atraumatic restorative treatment reduce dental anxiety in children? A systematic review and meta-analysis. <i>European journal of dentistry</i> 2015;9:304-9.	Wrong study design
Singhal DK, Acharya S, Thakur AS. Microbiological analysis after complete or partial removal of carious dentin using two different techniques in primary teeth: A randomized clinical trial. <i>Dental Research Journal</i> 2016;13:30-7.	Not relevant
Smail-Faugeron V, Glennly AM, Courson F, Durieux P, Muller-Bolla M, Fron Chabouis H. Pulp treatment for extensive decay in primary teeth. <i>Cochrane Database of Systematic Reviews</i> 2018;5:CD003220.	Not relevant
Tedesco TK, Gimenez T, Floriano I, Montagner AF, Camargo LB, Calvo AFB, et al. Scientific evidence for the management of dentin caries lesions in pediatric dentistry: A systematic review and network meta-analysis. <i>PLoS ONE [Electronic Resource]</i> 2018;13:e0206296.	Wrong study design
Tedesco TK, Calvo AF, Lenzi TL, Hesse D, Guglielmi CA, Camargo LB, et al. ART is an alternative for restoring occlusoproximal cavities in primary teeth - evidence from an updated systematic review and meta-analysis. <i>International Journal of Paediatric Dentistry</i> 2017;27:201-209.	Wrong study design
Tellez M, Gomez J, Kaur S, Pretty IA, Ellwood R, Ismail AI. Non-surgical management methods of noncavitated carious lesions. <i>Community Dentistry & Oral Epidemiology</i> 2013;41:79-96.	Not relevant
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Studies with high risk of bias

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