**S5 Table** Assessment of the study quality using the Modified Newcastle Ottawa Scale

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Selection** | | **Comparability** | | | | **Outcome** | | **Total quality score** |
| Reference | Selection of the cohort | Condition of the cohort | Diagnostics of cases and controls | Pulpal inflammation confirmation histologically | Quality of the controls | Ratio of the group size (control:case) | Reported blinding to case/control status | Same tests performed for cases and controls |
| Bolanos and Seltzer 1981 [[82](#_ENREF_82)] | - | - | \* | - | - | - | \* | \* | 3 |
| Cohen et al. 1985 [[47](#_ENREF_47)] | \* | \* | \* | - | - | \* | - | \* | 5 |
| Nakanishi et al. 1995 [[44](#_ENREF_44)] | - | \* | \* | - | - | - | - | \* | 3 |
| Cootauco et al. 1993 [[73](#_ENREF_73)] | - | - | \* | \* | - | \* | - | \* | 4 |
| Ge *et al.* 1996 [[69](#_ENREF_69)] | - | \* | - | - | - | \* | - | \* | 3 |
| Rauschenberger et al. 1997 [[52](#_ENREF_52)] | - | \* | \* | \* | - | \* | - | \* | 5 |
| Tulunoglu et al. 1998 [[70](#_ENREF_70)] | - | \* | \* | - | - | \* | - | \* | 4 |
| Dong et al. 1999 [[83](#_ENREF_83)] | - | \* | - | - | - | \* | - | \* | 3 |
| Huang et al. 1999 [[54](#_ENREF_54)] | - | \* | \* | \* | - | \* | - | \* | 5 |
| Lepinski et al. 2000 [[41](#_ENREF_41)] | \* | - | \* | - | - | \* | - | \* | 4 |
| Khabbaz et al. 2001 [[84](#_ENREF_84)] | \* | - | \* | - | - | - | \* | \* | 4 |
| Nakanishi et al. 2001 [[85](#_ENREF_85)] | - | \* | - | \* | - | \* | - | \* | 4 |
| Spoto, Fioroni, Rubini, Tripodi, Di Stilio et al. 2001 [[74](#_ENREF_74)] | - | - | - | \* | - | \* | - | \* | 3 |
| Spoto, Fioroni, Rubini, Tripodi, Perinetti et al. 2001 [[75](#_ENREF_75)] | - | - | - | - | - | \* | - | \* | 2 |
| Anderson et al. 2002 [[53](#_ENREF_53)] | - | - | \* | - | - | \* | \* | \* | 4 |
| Artese et al. 2002 [[91](#_ENREF_91)] | - | - | - | \* | - | \* | - | \* | 3 |
| Awawdeh et al. 2002 [[87](#_ENREF_87)] | \* | \* | - | - | - | - | \* | \* | 4 |
| Gusman et al. 2002 [[63](#_ENREF_63)] | \* | \* | \* | - | - | \* | - | \* | 5 |
| Pezelj-Ribaric et al. 2002 [[55](#_ENREF_55)] | - | - | \* | - | - | \* | - | \* | 3 |
| Bowles et al. 2003 [[42](#_ENREF_42)] | - | - | \* | - | - | \* | - | \* | 3 |
| Esposito, Varvara, Caputi et al. 2003 [[76](#_ENREF_76)] | \* | \* | \* | - | - | \* | \* | \* | 6 |
| Esposito, Varvara, Murmura et al. 2003 [[77](#_ENREF_77)] | \* | \* | \* | - | - | \* | - | \* | 5 |
| Zehnder et al. 2003 [[48](#_ENREF_48)] | \* | \* | \* | - | - | \* | - | \* | 5 |
| Caviedes-Bucheli et al. 2004 [[89](#_ENREF_89)] | - | - | \* | - | - | \* | - | \* | 3 |
| Di Nardo Di Maio et al. 2004 [[79](#_ENREF_79)] | - | - | \* | \* | - | \* | - | \* | 4 |
| Piattelli et al. 2004 [[59](#_ENREF_59)] | - | - | - | \* | - | \* | \* | \* | 4 |
| Spoto, Ferrante et al. 2004 [[80](#_ENREF_80)] | - | - | - | - | - | \* | - | \* | 2 |
| Spoto, Menna et al. 2004 [[81](#_ENREF_81)] | - | - | - | - | - | \* | - | \* | 2 |
| Caviedes-Bucheli et al. 2005 [[90](#_ENREF_90)] | - | - | \* | - | - | \* | - | \* | 3 |
| Huang et al. 2005 [[67](#_ENREF_67)] | - | \* | \* | \* | - | \* | - | \* | 5 |
| Nakanishi et al. 2005 [[58](#_ENREF_58)] | - | \* | - | \* | - | \* | - | \* | 4 |
| Tsai et al. 2005 [[65](#_ENREF_65)] | - | \* | \* | \* | - | \* | - | \* | 5 |
| Varvara et al. 2005 [[72](#_ENREF_72)] | \* | \* | \* | - | - | \* | - | \* | 5 |
| Caviedes-Bucheli et al. 2006 [[88](#_ENREF_88)] | - | - | - | - | - | \* | - | \* | 2 |
| Evcil et al. 2006 [[46](#_ENREF_46)] | \* | \* | - | - | \* | \* | - | \* | 5 |
| Adachi et al. 2007 [[60](#_ENREF_60)] | - | \* | - | \* | - | - | - | \* | 3 |
| Bodor et al. 2007 [[71](#_ENREF_71)] | \* | \* | \* | - | - | \* | - | \* | 5 |
| Caviedes-Bucheli et al. 2007 [[92](#_ENREF_92)] | \* | - | - | - | - | \* | - | \* | 3 |
| Guven et al. 2007 [[86](#_ENREF_86)] | - | \* | - | \* | - | \* | - | \* | 4 |
| Huang et al. 2007 [[68](#_ENREF_68)] | - | \* | - | \* | - | - | - | \* | 3 |
| Kokkas et al. 2007 [[43](#_ENREF_43)] | - | - | \* | - | - | \* | - | \* | 3 |
| Caviedes-Bucheli, Moreno et al. 2008 [[93](#_ENREF_93)] | - | - | - | - | - | \* | - | \* | 2 |
| da Silva et al. 2008 [[78](#_ENREF_78)] | - | - | - | \* | - | \* | \* | \* | 4 |
| Jiang et al. 2008 [[61](#_ENREF_61)] | - | - | \* | \* | - | \* | - | \* | 4 |
| Karapanou et al. 2008 [[1](#_ENREF_1)] | \* | \* | \* | - | \* | \* | - | \* | 6 |
| Huang et al. 2009 [[62](#_ENREF_62)] | - | \* | \* | \* | - | \* | - | \* | 5 |
| Keller et al. 2009 [[56](#_ENREF_56)] | - | - | \* | - | - | \* | - | \* | 3 |
| Paris et al. 2009 [[50](#_ENREF_50)] | - | - | \* | - | - | \* | - | \* | 3 |
| Silva et al. 2009 [[51](#_ENREF_51)] | - | - | \* | \* | - | \* | \* | \* | 5 |
| Li et al. 2011 [[57](#_ENREF_57)] | \* | \* | - | \* | - | \* | - | \* | 5 |
| Zehnder et al. 2011 [[33](#_ENREF_33)] | \* | \* | \* | - | - | \* | \* | \* | 6 |
| Suwanchai et al. 2012 [[66](#_ENREF_66)] | - | - | - | - | - | \* | - | \* | 2 |
| Zhong et al. 2012 [[94](#_ENREF_94)] | \* | \* | \* | - | - | \* | - | \* | 5 |
| Abd-Elmeguid et al. 2013 [[49](#_ENREF_49)] | - | - | \* | \* | - | \* | \* | \* | 5 |
| Accorsi-Mendonca et al. 2013 [[64](#_ENREF_64)] | - | \* | \* | - | - | \* | - | \* | 4 |
| Dong et al. 2013 [[95](#_ENREF_95)] | \* | \* | \* | \* | - | \* | - | \* | 6 |
| Elsalhy et al. 2013 [[45](#_ENREF_45)] | \* | \* | \* | - | - | \* | - | \* | 5 |

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