**Table 2S**: Quality evaluation of included article

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Study | Year | Total number of “Yes” in evaluation by quality check list | Objectivedefined | Outcomedescribed | Characteristicsof controlsdescribed | Confoundersdescribed | Mainfindingsoutlined | Heterogeneouspopulation | Strainimagingprotocol | Individualsgenerating datablinded tooutcomes | Sonographersblinded tooutcome | Wasreproducibilityanalysisperformed? | Patients/controlsubjectsrecruited oversame timeperiod |
| Padeletti et al | 2012 | 8 | Yes | Yes | Yes | Yes | Yes | NS | Yes | No | No | Yes | Yes |
| D’Ascenzi et al | 2013 | 6 | Yes | Yes | No | Yes | Yes | NS | Yes | Yes | No | No | No |
| Peluso et al | 2013 | 8 | Yes | Yes | Yes | Yes | Yes | NS | Yes | No | No | Yes | Yes |
| Pagourelias et al | 2013 | 7 | Yes | Yes | Yes | Yes | Yes | NS | Yes | No | No | Yes | No |
| Gabrielli et al | 2014 | 7 | Yes | Yes | No | Yes | Yes | NS | Yes | Yes | No | Yes | No |
| Durmus et al | 2015 | 6 | Yes | Yes | No | Yes | Yes | NS | Yes | No | No | Yes | No |
| McClean et al | 2015 | 6 | Yes | Yes | Yes | Yes | Yes | NS | Yes | No | No | No | No |
| Querejeta Roca et al | 2015 | 8 | Yes | Yes | Yes | Yes | Yes | NS | Yes | Yes | No | Yes | No |
| Tadic et al | 2015 | 7 | Yes | Yes | Yes | Yes | Yes | NS | Yes | No | No | Yes | No |
| Gabrielli et al | 2016 | 8 | Yes | Yes | Yes | Yes | Yes | NS | Yes | No | Yes | Yes | No |
| Brand et al | 2018 | 8 | Yes | Yes | Yes | Yes | Yes | NS | Yes | No | No | Yes | Yes |
| Li et al | 2018 | 6 | Yes | Yes | Yes | Yes | Yes | NS | Yes | No | No | No | No |
| Can Bostan et al | 2020 | 7 | Yes | Yes | Yes | Yes | Yes | NS | Yes | No | No | Yes | No |
| Palmer et al | 2020 | 6 | Yes | Yes | Yes | Yes | Yes | NS | Yes | No | No | No | No |
| Soulat-Dufour et al | 2020 | 9 | Yes | Yes | Yes | Yes | Yes | NS | Yes | Yes | Yes | No | Yes |