

**Supplementary Table 1.** Quality assessment according to Newcastle-Ottawa quality assessment scale

Study	Selection			Comparability		Exposure/outcome				
	Representativeness of exposed cohort	Selection of non-exposed cohort	Ascertainment of exposure	Demonstration that outcome of interest was not present at the start	Controls for age or gender	Controls for additional factor	Assessment of outcome	Follow-up long enough for outcomes to occur	Adequacy of follow-up of cohort	total
<b>Chronic liver disease</b>										
Ai et al. <sup>4</sup>	1	0	1	1	1	1	1	1	1	8
Bakasis et al. <sup>5</sup>	1	1	1	1	1	1	1	1	1	9
He et al. <sup>6</sup>	1	1	1	1	1	1	1	1	1	9
Ruether et al. <sup>7</sup>	1	1	1	1	1	1	1	1	1	9
Thuluvath et al. <sup>8</sup>	1	0	1	1	0	0	1	1	1	6
Wang et al. <sup>9</sup>	1	0	1	1	0	0	1	1	1	6
Xiang et al. <sup>10</sup>	1	0	1	1	0	0	1	1	1	6
<b>Liver transplant (2 doses)</b>										
Rashidi-Alavijeh et al. <sup>11</sup>	1	1	1	1	1	1	1	1	1	9
Boyarsky et al. <sup>12</sup>	1	0	1	1	0	0	1	1	1	6
Cholankeril et al. <sup>13</sup>	1	0	1	1	1	1	1	1	1	8
Davidov et al. <sup>14</sup>	1	0	1	1	1	1	1	1	1	8
Erol et al. <sup>15</sup>	1	0	1	1	0	0	1	1	1	6
Fernández-Ruiz et al. <sup>16</sup>	1	0	1	1	0	0	1	1	1	6
Guarino et al. <sup>17</sup>	1	0	1	1	1	1	1	1	1	8
Hall et al. <sup>18</sup>	1	0	1	1	0	0	1	1	1	6
Herrera et al. <sup>19</sup>	1	0	1	1	0	0	1	1	1	6
Holden et al. <sup>20</sup>	1	0	1	1	0	0	1	1	1	6
Huang et al. <sup>21</sup>	1	0	1	1	0	0	1	1	1	6
Marion et al. <sup>22</sup>	1	0	1	1	0	0	1	1	1	6
Mazzola et al. <sup>23</sup>	1	0	1	1	0	0	1	1	1	6
Mulder et al. <sup>24</sup>	1	0	1	1	1	1	1	1	1	8
Nazaruk et al. <sup>25</sup>	1	0	1	1	0	0	1	1	1	6
Rabinowich et al. <sup>26</sup>	1	0	1	1	1	1	1	1	1	8
Ruether et al. <sup>7</sup>	1	1	1	1	1	1	1	1	1	9

Supplementary Table 1. Continted

Study	Selection			Comparability		Exposure/outcome				
	Representativeness of exposed cohort	Selection of non-exposed cohort	Ascertainment of exposure	Demonstration that outcome of interest was not present at the start	Controls for age or gender	Controls for additional factor	Assessment of outcome	Follow-up long enough for outcomes to occur	Adequacy of follow-up of cohort	total
Strauss et al. <sup>27</sup>	1	0	1	1	1	1	1	1	1	8
Thuluvath et al. <sup>8</sup>	1	0	1	1	0	0	1	1	1	6
Timmermann et al. <sup>28</sup>	1	0	1	1	1	1	1	1	1	8
Liver transplant (3 doses)										
Del Bello et al. <sup>1</sup>	1	0	1	1	1	1	1	1	1	8
Kamar et al. <sup>2</sup>	1	0	1	1	0	0	1	1	1	6
Werbel et al. <sup>3</sup>	1	0	1	1	0	0	1	1	1	6