Sources
We systematically reviewed the English literature from 2010 till present day for articles that addressed outcome comparisons between spontaneously conceived and IVF-conceived twin pregnancies. Searches were conducted under appropriate key words via PubMed, Medline and the Cochrane Library. We also checked Clinical.Trials.gov for ongoing studies on the subject. In our review, we included both multicentre and national studies as well as single centre ones, as long as the sample size was large enough for the risk of possible biases to be minimized.

Since keywords could not reflect the subject under question in isolation, we conducted our search with the following phrases: “outcome comparisons/maternal outcome comparisons/perinatal outcome comparisons/neonatal outcome comparisons between spontaneous and IVF/ART twin pregnancies.

The methodological characteristics of included studies are presented in Table 1.

Hypertensive disorders in pregnancy
It is known that the incidence of hypertensive disorders in pregnancy is higher in women with multiple

Table 1. Methodological characteristics of included studies.

<table>
<thead>
<tr>
<th>AUTHORS</th>
<th>YEAR</th>
<th>STUDY FORMAT</th>
<th>TWINS</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Källén et al</td>
<td>2010</td>
<td>National</td>
<td>DCDA</td>
<td>Significant increase in IVF of PTB (&lt;32weeks)</td>
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<tr>
<td>Yang et al</td>
<td>2011</td>
<td>Retrospective Single Centre</td>
<td>DCDA</td>
<td>No association between obstetric complications and method of conception including deliveries before 32, 34, and 37 weeks’ gestation, PTB, PPROM, PET</td>
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<tr>
<td>Anbazahagan et al</td>
<td>2014</td>
<td>Multicenter prospective trial</td>
<td>Diamniotic twins</td>
<td>No difference between IVF and spontaneous twins</td>
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<tr>
<td>Andrijasevic et al</td>
<td>2014</td>
<td>Retrospective Single Centre</td>
<td></td>
<td>No significant differences with regards to pregnancy complications between groups with and without ART. ART twins were more likely to have PPROM</td>
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<tr>
<td>Barda et al</td>
<td>2016</td>
<td>Retrospective Single Centre</td>
<td>DCDA</td>
<td>PIH/PPROM/PTB was significantly higher in the IVF compared to that in spontaneous twin pregnancies. No differences in the rate of GDM between the groups</td>
</tr>
<tr>
<td>Saccone et al</td>
<td>2017</td>
<td>Retrospective cohort study</td>
<td>Diamniotic twins</td>
<td>IVF-conceived twin pregnancies had a significantly higher risk of PTB. IVF-conceived group had a higher incidence of delivery due to spontaneous onset of labor compared to spontaneously-conceived twin pregnancies (64.5% vs 54.9%; AOR 1.50, 95% CI 1.03 to 2.17)</td>
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<tr>
<td>Okby et al</td>
<td>2017</td>
<td>Retrospective population-based cohort study</td>
<td></td>
<td>PET/PTB/GDM was more common in the IVF twins compared to the spontaneous twins</td>
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<tr>
<td>Jiang et al</td>
<td>2020</td>
<td>Multicenter cross-sectional study from China</td>
<td></td>
<td>GDM/PROM/PPROM were significantly more common in twin pregnancies conceived by IVF/ICSI than in pregnancies conceived spontaneously</td>
</tr>
<tr>
<td>Duy Anh et al</td>
<td>2022</td>
<td>Retrospective Single Centre</td>
<td>DCDA</td>
<td>IVF/ICSI group had significantly higher risks of PET</td>
</tr>
<tr>
<td>Gulersen et al</td>
<td>2022</td>
<td>Retrospective United States population-based cohort study</td>
<td></td>
<td>IVF in twins was associated with an increased risk of GDM, hypertensive disorders of pregnancy. PTB &lt;28 weeks</td>
</tr>
</tbody>
</table>