Actim Partus test is a fast and simple bedside test that can efficiently rule out the risk of imminent or preterm delivery. It helps to identify patients who are most in need of urgent treatment.

Preterm delivery (PTD) is a serious pregnancy complication and a major cause of infant deaths. 50% of pregnant women experience preterm contractions, yet only 20% of them actually deliver preterm.

Identifying the patients who are truly at risk of imminent or preterm delivery will improve patient care, and also save hospitals valuable time and resources.
IGFBP-1 is a protein produced by human decidua. The decidual form of IGFBP-1 is highly phosphorylated (phIGFBP-1) and differs from the IGFBP-1 present in amniotic fluid (less- and non-phosphorylated forms). These different forms can be distinguished by using different pairs of monoclonal antibodies. Actim Partus detects the phosphorylated form of Insulin-like growth factor binding protein 1, phIGFBP-1.

When there are clinically significant changes in the fetal membranes due to contractions, the decidua and chorion start to detach causing decidual cells to break. This causes phIGFBP-1 to leak into the cervix. Actim Partus can identify this simply through the use of a cervical swab sample (Figure 1).

**WHY phIGFBP-1 IS A RELIABLE MARKER**

Actim Partus detects the phIGFBP-1 in cervical fluid extract at concentrations of ≥ 10 µg/l, which indicate tissue disruption that can lead to preterm delivery. Actim Partus recognizes these changes even before the signs are clinically visible.

Most women remain sexually active during pregnancy. With Actim Partus test there is no need to exclude these patients as recent intercourse does not interfere with the test. This is because semen and urine do not contain detectable amounts of IGFBP-1.

**Clinical evidence of Actim Partus as a predictor of delivery within 7 days**

<table>
<thead>
<tr>
<th>Study</th>
<th>n</th>
<th>GA (wk)</th>
<th>Sens. (%)</th>
<th>Spec. (%)</th>
<th>PPV (%)</th>
<th>NPV (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azlin et al. 2010</td>
<td>51</td>
<td>24–36</td>
<td>80</td>
<td>94</td>
<td>57</td>
<td>98</td>
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<td>Brik Spinelli M et al. 2010</td>
<td>276</td>
<td>24–34</td>
<td>73</td>
<td>66</td>
<td>22</td>
<td>95</td>
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<tr>
<td>Tanir HM et al. 2009</td>
<td>68</td>
<td>24–37</td>
<td>93</td>
<td>79</td>
<td>56</td>
<td>98</td>
</tr>
<tr>
<td>Eroglu D et al. 2007</td>
<td>51</td>
<td>24–35</td>
<td>83</td>
<td>84</td>
<td>42</td>
<td>97</td>
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<td>Ting HS et al. 2007</td>
<td>94</td>
<td>24–34</td>
<td>69</td>
<td>78</td>
<td>39</td>
<td>92</td>
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<tr>
<td>Lembet et al. 2002</td>
<td>36</td>
<td>20–36</td>
<td>94</td>
<td>85</td>
<td>83</td>
<td>94</td>
</tr>
</tbody>
</table>

Actim Partus test effectively rules out the risk of preterm delivery.

**7 reasons why Actim Partus is beneficial**

Thanks to Actim Partus, patients really at risk of preterm delivery can be identified more reliably than ever. Here’s how it can help you.

- It reliably rules out imminent or preterm delivery (PTD)
- It detects PTD before symptoms are clinically visible
- It provides fast results at the bedside in just 5 minutes
- Clinical evidence from multiple published clinical studies proves its effectiveness
- It’s the only test that measures the unique biomarker phIGFBP-1
- It can be used from 22 weeks onwards
- Intercourse, semen, urine, vaginal medications, lubricants or bathing products don’t interfere with test results

![Figure 1](attachment:image.png)
It can often be a challenge to know the difference between patients having ineffective contractions and those at real risk of Preterm Delivery (PTD). Consequently, prolonged and often unnecessary costly hospital admissions and potentially harmful treatments are all too common. Recently, a clinical trial was performed in Germany assessing the treatment of singleton pregnancies with symptoms of preterm delivery. Patients with intermediate cervical length (15–25 mm) and a negative Actim Partus test were included and divided into two groups. One group was managed with tocolytics and steroids and the other without medication. The results showed that with the help of Actim Partus test the management of the expectant mother without tocolytics and steroids is indeed possible.

S. Pelletier et al.2013

Clinical evidence from multiple studies proves that Actim Partus has a very high negative predictive value. This makes the test a reliable tool to rule out imminent or preterm delivery (Table 1).

Actim Partus test results are not affected by fluids such as semen, urine, vaginal medications, lubricants or bathing products.

WHAT ACTIM PARTUS RESULTS SHOW

More than 2/3 of the symptomatic women get a negative result, and are at low risk of imminent or preterm delivery.

About 1/3 of the women get a positive result, and have elevated risk of preterm delivery.

WHAT DOES NEGATIVE ACTIM PARTUS RESULT MEAN?

• There are no clinically significant changes in the chorio-decidual area.

• Negative result indicates that delivery within next 1–2 weeks is highly unlikely. The patient can be even sent home unless otherwise clinically indicated.

WHAT DOES POSITIVE ACTIM PARTUS RESULT MEAN?

• There are changes in fetal membranes (detachment of decidua and chorion) that indicate increased risk of PTD.

• Patient should be examined further for other possible risk factors and managed according to clinical picture of the patient.
8 WAYS ACTIM PARTUS CAN BENEFIT YOUR HOSPITAL AND YOUR PATIENTS

- It helps to stop unnecessary hospital stays
- It helps to stop unnecessary patient transfers
- It helps to stop unnecessary medications
- It allows you to focus on those who really need medical attention
- It allows correct treatment to be provided on time
- It clarifies the timeframe for preparing the fetus for delivery
- It helps to stop side effects from unnecessary medication
- It reduces stress for mothers and families

COST SAVINGS

IMPROVED PATIENT CARE
HOW TO USE ACTIM PARTUS

- One-step dipstick test - very easy to use
- Sampling takes only seconds
- Fast results at the bedside in just 5 minutes
- Test kit contains all the necessary materials

1. Collect sample
2. Extract Specimen
3.–4. Activate the test
5. Result interpretation

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**Technical information**

<table>
<thead>
<tr>
<th>Biochemical marker</th>
<th>Phosphorylated IGFBP-1 (phIGFBP-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample type</td>
<td>Swab from cervical os during sterile speculum examination</td>
</tr>
<tr>
<td>Sampling time</td>
<td>10–15 seconds</td>
</tr>
<tr>
<td>Processing time</td>
<td>10–15 seconds</td>
</tr>
<tr>
<td>Reading time</td>
<td>5 minutes or less</td>
</tr>
<tr>
<td>Suitable gestational ages</td>
<td>Starting from GA of 22 weeks</td>
</tr>
<tr>
<td>Detection limit</td>
<td>10 µg/l in the extracted sample</td>
</tr>
<tr>
<td>Storage</td>
<td>+2...+25 °C</td>
</tr>
</tbody>
</table>
Selected references

The full reference list can be found on our website.