PROcalcitonin and NEWS2 evaluation for Timely identification of sepsis and Optimal use of antibiotics in the emergency department (PRONTO): protocol for a multicentre, open-label, randomised controlled trial


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http://sro.sussex.ac.uk
Patient ≥ 16 years presenting to ED with suspected sepsis

NEWS2 & standard care assessment at ED triage

Eligibility assessed and no exclusion criteria

Enrolment and Randomisation

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**Standard care arm**

NEWS2 and standard care assessment

(This may include NICE NG51 or other locally applied criteria including simple physician judgment)

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**Intervention arm**

PCT and NEWS2 as adjunct for risk stratification aligned to NEWS2 and standard care.

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**STRATIFY RISK**

**Site specific standard care assessment**

<table>
<thead>
<tr>
<th>NEWS2</th>
<th>low or medium</th>
<th>high</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5</td>
<td>low</td>
<td>high</td>
</tr>
<tr>
<td>5-6</td>
<td>low</td>
<td>high</td>
</tr>
<tr>
<td>≥7</td>
<td>medium**</td>
<td>high</td>
</tr>
</tbody>
</table>

In low and medium group, consider if any additional factors\(^\ast\) suggesting presence/risk of sepsis or other clinical concern

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**High Risk**

Senior review and IV antibiotics within an hour, and blood tests and IV fluids as per standard care

**Medium Risk**

Urgent Senior review and manage as high risk IF sepsis. Antibiotics within 3 hours.

www.nice.org.uk/guidance/ng51/

**Low Risk**

Clinical assessment and manage according to clinical judgement as per standard care

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**Deferred Consent**

Follow up until discharge

Day 28 and Day 90 Follow Up

Analysis

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**Additional factors**

- Single NEWS2 parameter of 3
- Non-blanching rash or mottled/ashen/ cyanotic skin;
- Reduced responsiveness
- Not passed urine in 18 hours / reduced output
- Lactate >2