Randomised treatment: HFNC

Flow rate: up to 10 kg patient weight
Start at 2 l/kg/min
For patients >10 kg, use weight-banded flow rate guide
Titrate FiO₂ to maintain SpO₂ ≥92%
(or patient-specific target)

MONITOR CLINICALLY FOR RESPONSE
Measure and record vital signs and clinical observations at least every hour for the first 6 hours

RESPONSE
Improving respiratory failure

START WEANING HFNC
At treating clinician’s discretion when FiO₂ <0.40

50% of original flow rate
If clinically worse

STOP HFNC
At treating clinician’s discretion
Switch to low flow nasal cannula oxygen
Titrate to keep SpO₂≥92%
(or patient-specific target)

NO RESPONSE
Persistent or worsening respiratory failure
Evidence by one or more:
FiO₂ >0.60
Recurrent apnoeas
pH ≤7.20 & pCO₂ >7.5 kPa
Respiratory distress worsens

Crossover to CPAP
(see CPAP algorithm)

Escalation to Pressure Support and/or BiPAP
Endotracheal intubation and invasive ventilation

<table>
<thead>
<tr>
<th>Weight</th>
<th>Flow rate</th>
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<tbody>
<tr>
<td>&lt;10 kg</td>
<td>2 l/kg/min</td>
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<tr>
<td>10-&lt;20 kg</td>
<td>25 l/min</td>
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<td>20-&lt;30 kg</td>
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<td>40-&lt;50 kg</td>
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<tr>
<td>50-&lt;60 kg</td>
<td>45 l/min</td>
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<tr>
<td>≥ 60 kg</td>
<td>50 l/min max</td>
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