**FONDAPARINUX FOR THE TREATMENT OF ACUTE CORONARY SYNDROMES (ACS)**

Fondaparinux is synthetic pentasaccharide that inhibits activated factor X. It is the antithrombotic of choice for the treatment of ACS within the Trust.

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**Unstable angina (USA) and Non ST Elevation MI (NSTEMI)**

Treatment of USA or NSTEMI in patients for whom urgent management (<120mins) with PCI is not indicated

**Dose:** Fondaparinux 2.5mg s/c once daily for up to 8 days or until discharge.

Fondaparinux should be given to all patients without a high risk of bleeding unless angiography is planned in the next 24 hours when unfractionated dose adjusted heparin would be the preferred agent.

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**ST Elevation MI (STEMI)**

Treatment of STEMI in patients who are to be managed with thrombolitics or who are to receive no other form of reperfusion therapy

**Dose:** Fondaparinux 2.5mg by i/v injection for the first day followed by 2.5mg s/c once daily for up to 8 days or until discharge.

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**PRESCRIBING INFORMATION**

**RENAL IMPAIRMENT**

Fondaparinux should not be used if creatinine clearance is less than 20ml/min or if creatinine is greater than 265micromoles/l. If the creatinine result is unavailable before the first dose is given the dose should be administered. The renal function should then be checked prior to further doses being administered. In patients with renal impairment as described above the Fondaparinux should be stopped and unfractionated heparin with dose adjusted to clotting factors used.

*Calculating creatinine clearance (CrCl) using Cockcroft and Gault*

\[
\text{CrCl ml/min} = \frac{\text{F} \times (140 - \text{age (yrs)}) \times \text{weight (kg)}}{\text{Serum creatinine (micromol/l)}}
\]

(where F =1.23 for males and 1.04 for females)

**BLEEDING RISK**

Choice of antithrombin should be considered in those at high risk of bleeding ie those with advancing age, known bleeding complications, renal impairment and low body weight. The use of antithrombin in these patients should be discussed with the Consultant Cardiologist or Specialist Registrar on call from Sheffield as appropriate.

**URGENT ANGIO**

If angiography is likely in the first 24 hours the antithrombin agent chosen should be unfractionated heparin.
PROPHYLACTIC ANTICOAGULATION
Fondaparinux provides a prophylactic level of anticoagulation and thus this will also act as a thromboprophylactic agent in these patients.

As Fondaparinux at this dose provides a prophylactic level of anticoagulation it is not suitable for indications where a therapeutic level of anticoagulation is required, eg mechanical prosthetic valves, AF with high risk of cardiac thromboembolism, DVT or PE etc. These patients should be managed with Enoxaparin or intravenous dose adjusted heparin as appropriate. The use of antithrombin in these patients should be discussed with the Consultant Cardiologist or Specialist Registrar on call from Sheffield as appropriate.

Similarly patients admitted on Warfarin need to have their choice of antithrombin therapy discussed with the Consultant Cardiologist or Specialist Registrar on call from Sheffield as appropriate.

LENGTH OF COURSE
Fondaparinux should be continued for at least 48 hours after last episode of chest pain up to 8 days or until day of discharge.

ANGIOGRAPHY +/- PCI
Fondaparinux should be omitted for 24 hours prior to angiography +/- PCI (eg last dose 09.00hrs day before)

ANTIDOTE
There is no known antidote that reverses the anticoagulant effects of Fondaparinux. Bleeding complications during therapy or overdosage of Fondaparinux should lead to immediate treatment discontinuation and initiation of appropriate supportive therapy. Advice should be sought from the Consultant Haematologist for major bleeds.

SWITCHING BETWEEN ANTICOAGULANTS

SWITCHING TO FONDAPARINUX FROM UNFRACTIONATED HEPARIN (UFH)
Stop UFH and administer Fondaparinux 2.5mg stat, followed by 2.5mg subcutaneously once daily.

SWITCHING TO FONDAPARINUX FROM ENOXAPARIN
Stop LMWH and administer Fondaparinux 2.5mg subcutaneously when the next dose would have been due then daily.

SWITCHING TO THERAPEUTIC ENOXAPARIN FROM FONDAPARINUX
Stop Fondaparinux and use standard Enoxaparin regime as soon as therapeutic anticoagulation is clinically indicated.

SWITCHING TO UNFRACTIONATED HEPARIN FROM FONDAPARINUX
Stop Fondaparinux. Omit heparin bolus dose if less than 24 hours since previous dose and use standard dose adjusted heparin immediately if therapeutic anticoagulation is clinically indicated. If replacing Fondaparinux with UFH due to renal impairment commence regime 24 hours after initial Fondaparinux dose in the usual way.

ADMINISTRATION NOTES

<table>
<thead>
<tr>
<th>SUBCUTANEOUS ADMINISTRATION</th>
<th>INTRAVENOUS ADMINISTRATION</th>
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<tbody>
<tr>
<td>Do not eject air from syringe prior to use</td>
<td>The intravenous dose should be via a vygon injectable bung</td>
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<tr>
<td>Always inject subcutaneously into the anterolateral and posterolateral wall (alternate left and right)</td>
<td>connected to the iv cannula via a swan lock needle free connector.</td>
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<td>Do not rub site after injection</td>
<td>Usual aseptic precautions should be taken and a sanicloth GHG 2%</td>
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<tr>
<td>Do not omit dose without first consulting with a doctor</td>
<td>wipe used to wipe the needle free connector prior to attaching</td>
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<tr>
<td></td>
<td>the injectable bung</td>
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FOR FURTHER INFORMATION PLEASE CONTACT MEDICINES INFORMATION ON EXT. 3317/ BLEEP 1347, OR CONTACT YOUR WARD PHARMACIST.