ADDITIONAL FILE

Additional file 1: Standard operating procedure of rituximab administration for the treatment of rheumatoid arthritis

Preparation

Before administering rituximab, the patient is examined by the treating rheumatologist.

One hour before the administration of rituximab, the patient receives premedication consisting of 1 g paracetamol, an antihistaminic (either cetirizine 10 mg orally or levocetirizine 5 mg orally), and 125 mg methylprednisolone intravenously in 50 ml NaCl 0.9%, or equivalent administered in five minutes.

Rituximab administration

Standard dosing regimen is 1000 mg rituximab intravenously, which is repeated after two weeks, albeit that an alternative regimen is possible.

Rituximab is administered in 250 ml NaCl 0.9%.

Speed of perfusion at day 1 (maximally 4 h 15 min):

Start administration – 30 min	12.5 ml/h
30 min– 1 h	25 ml/h
1 h – 1 h 30 min	37.5 ml/h
1 h 30 min – 2 h	50 ml/h
2 h – 2 h 30 min	62.5 ml/h
2 h 30 min – 3 h	75 ml/h
3 h – 3 h 30 min	87.5 ml/h
3 h 30 min – end of administration	100 ml/h

Speed of perfusion at day 14 (without prior infusion reaction – maximally 3 h 15 min):

Start administration – 30 min	25 ml/h
30 min– 1 h	50 ml/h
1 h – 1 h 30 min	75 ml/h
1 h 30 min – end of administration	100 ml/h

In case of an infusion reaction, the speed of the perfusion on day 1 is used.

Parameters (blood pressure, pulse rate, and body temperature) are checked at start of the administration and every 30 minutes.

At the end of the infusion, rinse with 50ml of NaCl 0.9%.

In case of adverse events:

- Stop the rituximab administration until the symptoms disappear
- Administer 50 ml NaCl 0.9%
- Check the vital parameters (blood pressure, pulse rate, body temperature, and respiratory rate)
- Contact the rheumatologist

- Wait 30 minutes. Once symptoms are controlled, the schedule can be restarted at half the rate at which the infusion reaction occurred (during 30 minutes, thereafter the normal infusion speed can be resumed).