| Waikato District Health Board |  | Type:<br>Drug<br>Guideline     | Document reference: 2980     | Manual Classification: Waikato DHB Drug Guidelines |                 |
|-------------------------------|--|--------------------------------|------------------------------|--|-----------------|
| Title: Vita                   | Effective date: 1 April 2020                 |                                |                              |  |                 |
| Facilitator sign/date         | Authorised sign/date                         | Authorised                     | Authorised sign/date         |  | Page:<br>1 of 2 |
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### **BRIEF ADMINISTRATION GUIDE**

For detailed information refer to The Australasian Neonatal Medicines Formulary vitamin K<sub>1</sub> guideline



Critical Note: there are minor variations between the ANMF and Waikato DHB best practice within this drug guideline – see shaded text

### Indications:

- Prophylaxis and treatment of vitamin K deficiency bleeding including haemorrhagic disease of the newborn.
- Supplementation in conjugated hyperbilirubinaemia

Route: Intravenous, intramuscular, oral or subcutaneous

Supplied as phytomenadione 2 mg/0.2 mL ampoule

(Note: the contents of the ampoule can be administered orally).

**Dose**: Prophylaxis of Vitamin K deficiency (IM route preferred)

| Route | Dose                      | Frequency                                     |
|-------|---------------------------|---|
| IM    | <1500 g: 0.5 mg (0.05 mL) | Single dose at birth                          |
|       | >1500 g: 1 mg (0.1 mL)    | _   |
| IV    | 0.3 mg/kg (max dose 1mg)  | Single dose at birth                          |
| Oral  | 2 mg                      | 3 doses: first dose at birth, second dose 3-7 |
|       |                           | days of age, third dose at 4 weeks of age     |

## <u>Treatment of Vitamin K deficiency</u> (IV route)

- 1 mg as a slow IV bolus (maximum 1 mg / minute).
- May be given subcutaneously if venous access is not available
- Dose can be repeated in 4-6 hours if required.

# Supplementation in treatment of conjugated hyperbilirubinaemia)

Note: given in combination with other fat soluble vitamins (refer to Starship guideline)

• 2 mg once a day (IV or oral) and increase according to INR.

# Preparation and administration:

#### Intramuscular administration

- Administer appropriate dose for weight into the thigh muscle in the leg
- Wash injection site well before needle insertion if mother is Hepatitis B positive

#### Intravenous Infusion

- Draw up required dose and administer by slow intravenous injection (not exceeding 1 mg / minute)
- If required dilute 2 mg (0.2 mL) up to 2 mL with glucose 5% or sodium chloride 0.9% to make a 1 mg/mL solution
- Discard any unused ampoule contents remaining

## Oral

- Draw up 2mg (0.2 mL) into the dispenser provided in the packet or an oral syringe
- Administer the contents of the dispenser or syringe directly into the mouth (or orogastric tube)
- Follow dose with fluid e.g. breast milk to ensure it is swallowed

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## **Monitoring:**

- Observe injection site for bleeding or any reaction
- Monitor prothrombin time when treating clotting abnormalities

# **Competency for administration:**

This procedure is carried out by, or under, the direct supervision of a registered nurse/registered midwife who holds current Waikato DHB Generic Medicine Management and IV certification (if giving intravenously).

### **Associated documents:**

- Vitamin K Administration in the New-born. Waikato DHB Women's Health guideline 2289
- Vitamin K for Newborn Babies to Prevent Serious Bleeding (KidsHealth)
- Jaundice Management of neonatal jaundice. Auckland DHB clinical guideline, July 2018. Accessed via <a href="https://www.starship.org.nz/guidelines/jaundice-management-of-neonatal-jaundice/">https://www.starship.org.nz/guidelines/jaundice-management-of-neonatal-jaundice/</a>
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- The Royal Children's Hospital Melbourne. Paediatric Injectable Guidelines. Accessed 25<sup>th</sup> November 2019. Available from: <a href="https://pig.rch.org.au">https://pig.rch.org.au</a>.
- Notes on Injectable Drugs 7<sup>th</sup> Edition, 2015. New Zealand Hospital Pharmacists' Association (Inc).
- Auckland DHB clinical guideline "Jaundice investigation of prolonged". February 2020. Accessed via <a href="https://www.starship.org.nz/guidelines/jaundice-investigation-of-prolonged/">https://www.starship.org.nz/guidelines/jaundice-investigation-of-prolonged/</a>

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