

|                           |  |
|---------------------------|--|
| <b>Indication</b>         | Prevention of vitamin deficiency in infants < 35 weeks gestation or < 2 kg birth weight.   |
| <b>Action</b>             | Multivitamin supplement  |
| <b>Drug Type</b>          | Multivitamin   |
| <b>Trade Name</b>         | Penta-Vite   |
| <b>Maximum daily dose</b> | 0.45 mL  |
| <b>Presentation</b>       | Oral liquid<br>Each 0.45 mL contains:<br>Vitamin A retinyl palmitate 490 microg<br>Vitamin B1 thiamine 0.54 mg<br>Vitamin B2 riboflavine sodium phosphate 1.1 mg (equiv. riboflavine 800 microg)<br>Vitamin B3 nicotinamide or Niacin 7.1 mg<br>Vitamin B6 pyridoxine 135 microg<br>Vitamin C ascorbic acid 42.8 mg<br>Vitamin D cholecalciferol 10.1 microg (400 Units)   |
| <b>Dosage / Interval</b>  | 0.45 mL daily. <b>NOTE: Dose not based on weight.</b>  |
| <b>Route</b>              | Oral   |
| <b>Administration</b>     | Oral or intra-gastric tube.<br>Administer undiluted or mixed with a small amount of milk into infant's mouth through a feeding teat or via intra-gastric tube.   |
| <b>Contraindications</b>  | Not yet tolerating full feeds.   |
| <b>Adverse Reactions</b>  | Direct administration into the mouth may cause choking and apnoea.   |
| <b>Stability</b>          | Store in refrigerator after opening.<br>Discard 9 weeks after opening (write date opened on bottle).   |
| <b>Storage</b>            | Store unopened bottle below 25°C. Protect from light.  |
| <b>Evidence summary</b>   | No studies were located which examined the impact of multivitamin supplementation on any outcomes in low birth weight (LBW) infants.<br>Policy statements from organisations in developed countries recommend providing multivitamin supplementation with a neonatal multivitamin preparation containing vitamins A, D, C, B1, B2, B6, pantothenic acid and niacin to all LBW infants receiving human milk from birth until the infant attains a weight of 2000 g.<br>Many units provide a multivitamin preparation to all LBW infants until 6 to 12 months chronological age.<br>Vitamin D – There is evidence of reduced linear growth and increased risk of rickets in babies with a birth weight < 1500 g fed un-supplemented human milk. There is no consistent benefit of increasing the intake of vitamin D above 400 Units per day.<br>There are no clinical trial data on the effect of vitamin D on key clinical outcomes in infants with a birth weight > 1500 g. |
| <b>Level of evidence</b>  | Expert opinion   |
| <b>References</b>         | 1. Product Information: Penta-Vite Multivitamins Oral Liquid. MIMSONline. Accessed 18/07/2014.<br>2. Optimal feeding of low-birth-weight infants, technical review. Karen Edmond, MBBS, MSc (Epidemiology), PhD. London School of Hygiene and Tropical Medicine, London, U.K. Rajiv Bahl, MD, PhD. Department of Child and Adolescent Health and Development, WHO, Geneva.   |

|  |   |
|--|---|
| <b>Original version Date: 08/08/2015</b> | <b>Author: Neonatal Medicines Formulary Consensus Group</b> |
| <b>Current Version number: 1</b>         | <b>Version Date: 08/08/2015</b>                             |
| <b>Risk Rating: Medium</b>               | <b>Due for Review: 08/08/2018</b>                           |
| <b>Approval by: JHCH CQ&amp;PCC</b>      | <b>Approval Date: 22/08/2017</b>                            |