



<b>DESCRIPTION</b>	<p>Albendazole is a broad spectrum benzimidazole anthelmintic, it binds to beta tubulin in the parasite inhibiting microtubule polymerisation resulting in the loss of cytoplasmic microtubules and inhibition of glucose uptake.<sup>1,2</sup></p> <p>Albendazole is used in the treatment of intestinal and tissue helminth infections including roundworm, threadworm, pinworm, hookworm, whipworm some tapeworm species, strongyloidiasis and in hydatid disease as an adjunct to surgery. Refer to product literature for further information regarding the specific species covered.<sup>3,4</sup></p>
<b>ChAMP INDICATIONS AND RESTRICTIONS</b>	<p><b>Oral: Category A: Unrestricted</b></p> <p>This is not a restricted agent. Follow standard ChAMP guidelines where appropriate.</p>
<b>FORMULATIONS</b>	<p>200mg chewable tablet</p>
<b>DOSAGE</b>	<p>The doses listed below fall within the standard range. Higher doses may be prescribed for certain situations. This should be in consultation with Infectious Diseases or Microbiology consultants.</p> <p><b>Oral:</b></p> <p><b>Roundworm, hookworm and threadworm:</b></p> <ul style="list-style-type: none"><li>• Children over 6months AND less than 10kg: 200mg as a single dose</li><li>• Children over 6 months AND more than 10kg: 400mg as a single dose.<sup>1,5</sup></li></ul> <p><b>Strongyloidiasis, cutaneous larva migrans, whipworm:</b></p> <ul style="list-style-type: none"><li>• Children over 6months AND less than 10kg: 200mg once daily for 3 days, Repeat after 7 days for strongyloidiasis.</li><li>• Children over 6 months AND more than 10kg: 400mg once daily for 3 days. Repeat after 7 days for strongyloidiasis.<sup>1,5</sup></li></ul> <p><b>Hydatid disease, Larval taeniasis:</b></p> <ul style="list-style-type: none"><li>• Children over 6 years of age: 7.5mg/kg/dose (to a maximum of 400mg) twice daily for 28 days. After 14 drug free days, the course may be repeated to a total of 3 cycles.<sup>1,5</sup></li></ul> <p><b>Neurocysticercosis:</b></p> <ul style="list-style-type: none"><li>• Children over 6 years of age: 7.5mg/kg/dose (to a maximum of 400mg) twice daily for 7 days. After 14 drug free days, the course may be repeated for a total of 3 cycles.<sup>1,5</sup> The need for corticosteroids and anticonvulsants should also be considered for this indication.<sup>2,6</sup></li></ul> <p><b>Neonates and children less than 6 months:</b></p> <p>Not routinely used in neonates or children less than 6 months, contact Infectious Disease or Microbiology consultants for advice.</p>
<b>DOSAGE ADJUSTMENT</b>	<p><b>Dosage adjustment required in renal impairment:</b></p> <p>There is limited information regarding the use of albendazole in renal impairment, No dosage adjustment is required, however care should be taken as there have been rare reports of acute renal failure with the use of albendazole.<sup>3,4,6</sup></p> <p><b>Dosage adjustment required in hepatic impairment:</b></p> <p>Use with caution in patients with abnormal liver function or decreased total leukocyte count due to the increased risk of hepatotoxicity and bone marrow suppression.<sup>2,3</sup> Consider reducing the dose in patients requiring extended therapy with hepatic impairment.<sup>1</sup></p>

<b>RECONSTITUTION</b>	Not applicable
<b>ADMINISTRATION</b>	When treating systemic infections, albendazole should be taken with a fatty meal to improve absorption. When used for the treatment of intestinal worms, albendazole should be taken on an empty stomach to limit systemic absorption allowing it to act locally in the gut. <sup>4</sup>
<b>MONITORING</b>	For patients on courses of treatment longer than 3 days, liver function tests and complete blood counts should be checked at the beginning of each cycle and every 2 weeks whilst on therapy. Faecal samples should also be taken to determine ova and parasite load. <sup>2,6,7</sup>
<b>ADVERSE EFFECTS</b>	Albendazole is quite well tolerated. Adverse effects are more common with high dose or extended duration of treatment. Adverse effects may be due to death of the parasite or heavy parasite burden. <sup>1</sup> <b>Common:</b> abdominal pain, neurological symptoms (in treatment for neurocysticercosis) fever, headache, worsening of disease. <sup>1,3</sup> <b>Rare:</b> diarrhoea, nausea, vomiting, dizziness, itchiness, rash, bone pain, low red cell count, severe hepatic abnormalities (including jaundice and hepatocellular damage), cholestatic jaundice, alopecia, Stevens Johnson Syndrome, hypersensitivity. <sup>1,3</sup>
<b>COMPATIBLE FLUIDS</b>	Not applicable
<b>PRECAUTIONS</b>	For females of child-bearing potential, pregnancy should be excluded before treatment is commenced and for at least one month following cessation of therapy. <sup>2,6,7</sup>  Long duration of treatment at higher doses increases the risk of hepatic abnormalities and bone marrow suppression. Regular monitoring should occur. <sup>3</sup>  Albendazole is contraindicated in ocular cysticercosis, due to the risk of severe eye damage. <sup>1</sup>
<b>COMMENTS</b>	Treatment of neurocysticercosis should include concurrent corticosteroid treatment for the first week and anticonvulsant therapy as necessary. <sup>2,8</sup>  Consider the need for iron replacement therapy in those patients being treated for hookworm. <sup>6</sup>


**\*\*Please note:** The information contained in this guideline is to assist with the preparation and administration of **albendazole**. Any variations to the doses recommended should be clarified with the prescriber prior to administration\*\*

## References:

1. Australian Medicines Handbook Pty Ltd. Australian Medicines Handbook [online] Adelaide (SA): Australian Medicines Handbook Pty Ltd accessed online 4<sup>th</sup> July 2013.
2. Taketomo CK, Hodding JH, Kraus DM, editors. Pediatric dosage handbook with international tradename index. 19<sup>th</sup> edition. Ohio: Lexi-Comp Inc;2012-2013. p. 67-68.
3. MIMS Australia Pty Ltd. MIMS [online]. St Leonards (NSW): CMPMedica Australia Pty Ltd; accessed online 4<sup>th</sup> July 2013.
4. Therapeutic Guidelines Ltd. eTG complete [online]. West Melbourne: Therapeutic Guidelines Ltd; accessed online 4<sup>th</sup> July 2013.
5. Kemp CA, McDowell JM, editors. Paediatric Pharmacopoeia 13<sup>th</sup> edition. Melbourne: Pharmacy Department, Royal Children's Hospital; 2005. p.6.
6. Elsevier. Clinical Pharmacology [online]. Tampa (Florida): Elsevier BV; accessed online 4<sup>th</sup> July 2013.
7. Truven Health Analytics. Micromedex 2.0 [online] Michigan. Truven Health Analytics; Accessed 4<sup>th</sup> July 2013.
8. Royal Pharmaceutical Society. Martindale: The Complete Drug Reference. [online] London UK. The Pharmaceutical Press 2013 accessed online 4<sup>th</sup> July 2013

## Disclaimer

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