

Physician
information

Liver and Brain

PATIENT SUPPORT PROGRAM



Comprehensive patient support program aiding the management of chronic liver diseases and its complications



THERAPEUTICS



liverandbrain.com

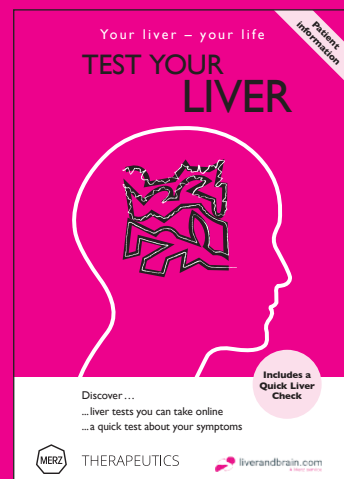
A Merz service

An innovative patient support program that helps you to ...

- Explain chronic liver diseases such as hepatic encephalopathy (HE) to your patients
- Reassure patients on HE causes, symptoms and treatments
- Motivate patients to improve their symptoms with useful information and tools
- Streamline consultations and reduce consultation times
- Helps patients get their lives back on track



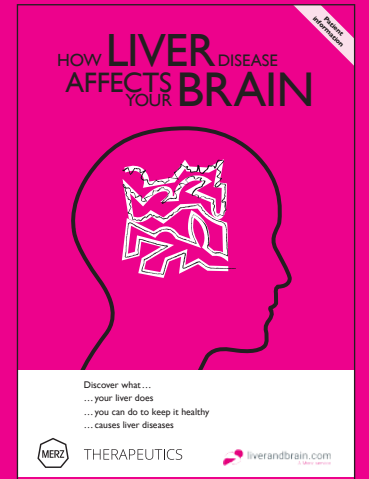
Liver tests for patients and caregivers



- An easy-to-use Quick Check helping patients keep track of their symptoms
- Overview of online tests available on liverandbrain.com
- Improves the quality of consultations by promoting targeted interventions
- Symptoms can be identified earlier (mainly through caregivers), helping you to provide earlier diagnosis and treatment

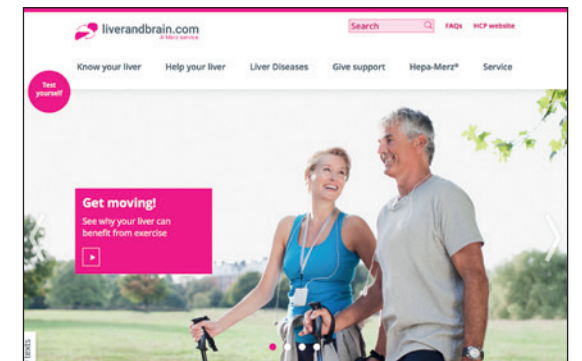
Patients/caregiver brochure

- Gives patients and caregivers a first overview about chronic liver diseases
- Simple, informative text and graphics emphasising the link between liver disease and HE
- Latest advice on nutrition and diet
- A range of tips and tools to help patients stay in control of their symptoms
- Useful links



Patients/caregiver website liverandbrain.com

- Complements the patient brochure, providing reassurance when it's needed most
- Provides everything patients and caregivers need to know to understand chronic liver diseases such as HE
- Simple, informative text and graphics emphasising the link between liver disease and HE
- Latest advice on nutrition and lifestyle
- A range of tips and tools to help patients stay in control of their symptoms
- Interactive tests that give patients a first impression about the health of their liver



Merz Therapeutics is an expert for chronic liver diseases and its neurological complications since more than five decades. We care for our patients and want to improve their quality of life by providing support and evidence-based information.

Useful to know ...

For more information, advice and support, please visit www.liverandbrain.com



Hepa-Merz® – Summary of prescribing information

Hepa-Merz® Granules. Active substance: L-ornithine L-aspartate. **Composition:** One sachet with 5 g of Granules contains: **Active substance:** 3 g L-ornithine L-aspartate. **Excipients:** citric acid, saccharin sodium, sodium cyclamate, povidone 25, fructose, flavorings, orange yellow S (E110). Note for diabetics: One sachet of Hepa-Merz® Granules contains 1.13 g of fructose (corresponds to approx. 0.11 BU). **Therapeutic indications:** Treatment of concomitant disease and sequelae due to impaired detoxification activity (e.g. in cirrhosis of the liver) with the symptoms of latent and manifest hepatic encephalopathy. **Contraindications:** Absolute: Hypersensitivity to L-ornithine L-aspartate, orange yellow S or any of the other excipients. Severely impaired renal function (renal insufficiency). A serum creatinine value over 3 mg/100 ml can be used as a guideline value. Relative: Pregnancy and lactation: No clinical data are available relating to intake of Hepa-Merz® Granules during pregnancy. No exhaustive animal studies have been performed for L-ornithine L-aspartate, to investigate its toxicity in relation to reproduction. Administration of Hepa-Merz® Granules during pregnancy should therefore be avoided. If, however, treatment with Hepa-Merz® Granules is considered necessary, careful consideration should be given to the benefit versus risk ratio. It is not known whether L-ornithine L-aspartate is excreted into the breast milk. Administration of Hepa-Merz® Granules should therefore be avoided during lactation. If, however, treatment with Hepa-Merz® Granules is considered necessary, careful consideration should be given to the benefit versus risk ratio. **Undesirable effects:** Uncommon ($\geq 1/1000$ to $< 1/100$): Nausea, vomiting, stomach ache, flatulence, diarrhea. Very rare ($< 1/10000$): Pain in the limbs. These undesirable effects are usually transient and do not require withdrawal of the medicine. Orange yellow S (E110) can trigger allergic reactions. **Warnings:** Hepa-Merz® Granules contain fructose. Patients with rare hereditary problems of fructose intolerance should not take this medicine. **Further precautions:** As a result of the disease, the ability to drive and operate machinery may be impaired during treatment with L-ornithine L-aspartate.

Hepa-Merz® Infusion concentrate. Active substance: L-ornithine L-aspartate. **Composition:** One ampoule of 10 ml contains: **Active substance:** 5 g L-ornithine L-aspartate. **Excipients:** Water for injections. **Therapeutic indications:** Latent and manifest hepatic encephalopathy. **Contraindications:** Absolute: Hypersensitivity to L-ornithine L-aspartate. Severe renal impairment (renal failure). A serum creatinine level in excess of 3 mg/100 ml can be taken as a guide. Relative: Pregnancy and lactation: There are no clinical data available on the use of Hepa-Merz® Infusion concentrate in pregnancy. L-ornithine L-aspartate has been investigated for reproduction toxicity only to a limited extent in experimental animal studies. The administration of Hepa-Merz® Infusion concentrate in pregnancy should therefore be avoided. If treatment with Hepa-Merz® is nevertheless thought to be necessary, the benefits and risks should be carefully assessed. It is not known whether L-ornithine L-aspartate passes into breast milk. Administration of Hepa-Merz® should therefore be avoided during lactation. If treatment with Hepa-Merz® is nevertheless thought to be necessary, the benefits and risks should be carefully assessed. **Undesirable effects:** Uncommon ($\geq 1/1000$ to $< 1/100$): Nausea. Rare ($\geq 1/10000$ to $< 1/1000$): vomiting. Frequency not known (frequency cannot be estimated from the available data): hypersensitivity, anaphylactic reaction. Generally however, the gastrointestinal symptoms are transient, and do not necessitate discontinuation of treatment. They disappear on reduction of the dose or the infusion rate. **Further precautions:** Hepa-Merz® concentrate for solution for infusion can be mixed with the usual infusion solutions. So far no peculiarities have been observed with regard to miscibility. However, the ampoules should be admixed to the infusion solution only immediately before application. At high doses of Hepa-Merz® Infusion concentrate, serum and urine urea levels should be monitored. If liver function is substantially impaired, the infusion rate must be adjusted to the individual patient in order to prevent nausea and vomiting. Depending on the underlying disease, the ability to drive and operate machines may also be impaired on treatment with L-ornithine L-aspartate. Hepa-Merz® Infusion concentrate must not be injected into an artery. Status: January 2013. Merz Pharmaceuticals GmbH, 60048 Frankfurt.

Reference: 1. Butterworth RF et al. J Clin Exp Hepatol. 2018; 8(3):301–313.



THERAPEUTICS



liverandbrain.com
A Merz service