Heavy/Light Chain - בדיקה בין ה-בז'ייק המאולות נפוצה
Multiple Myeloma (MM) –

The disease affects plasma cells in the bone marrow, which produce antibodies. These antibodies can develop into monoclonal gammopathies.

There are 5 types of heavy chains:
- IgG
- IgA
- IgM
- IgD
- IgE

There are also 5 types of light chains:
- Kappa
- Lambda

The disease is characterized by the presence of M-proteins in the blood. The most common types are:
- IgG kappa
- IgG lambda
- IgA kappa
- IgA lambda
- IgM kappa
- IgM lambda
- IgD kappa
- IgD lambda
- IgE kappa
- IgE lambda

Table 1: Types of M-proteins

<table>
<thead>
<tr>
<th>Type</th>
<th>Light Chain</th>
<th>Heavy Chain</th>
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<tbody>
<tr>
<td>IgG kappa</td>
<td>IgG lambda</td>
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<td>IgA kappa</td>
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What is Hevylite® (Heavy/light chain – HLC) test?

The Hevylite® test is a new and innovative test that distinguishes between the competing antibodies in the disease state. It is a fully automated immunological test that measures the absolute amount of light and heavy chain antibodies. The test is approved by the FDA.

In the Hevylite® test, the light chain is identified as a unique and specific marker for light chain disease. A ratio between the light and heavy chain is calculated from the test value.

- IgG kappa (g/L) 3.84-12.07
- IgG lambda (g/L) 1.91-6.74
- IgG kappa/IgG lambda ratio 1.12-3.21
- IgA kappa (g/L) 0.57-2.08
- IgA lambda (g/L) 0.44-2.04
- IgA kappa/IgA lambda ratio 0.78-1.94
- IgM kappa (g/L) 0.19-1.63
- IgM lambda (g/L) 0.12-1.01
- IgM kappa/IgM lambda ratio 1.18-2.74

The Hevylite® test is a marker of orbital disease and orbital disease is defined as a condition where the orbital disease is not related to the disease.
The use of Hevylite® in common malignancies.

Hevylite®-based tests provide information about the prognosis in the diagnosis of Hevylite®, which always signal the nature of the disease, whether residual disease during remission — 

1. Prognosis. In recent studies by Bradwell et al. and Ludwig et al., it was found that the parameters received in the Hevylite® test provide prognostic information (and to a lesser extent in the test).

2. Monitoring.

2.1 The Hevylite® test measures the total area of the malignant clone in a reasonable manner. In this way, IgA, IgG, and IgM are identified in Hevylite®-positive samples. Katzmann et al. found that the detection of IgA, IgG, and IgM is 90% sensitive and 98% specific.

2.2 Residual disease — monitoring after treatment.

2.3 Relapse — monitoring after treatment.

2.4 How can Freelite®- and Hevylite®-based methods be used with success? Freelite® and Hevylite® methods are used to monitor patients with MM and other hematological diseases. Ayliffe et al. found that Freelite® and Hevylite® methods are 90% sensitive and 98% specific.

5.5 Additional information is provided for future treatments.

? How can we use Freelite® and Hevylite® methods for successful monitoring? Freelite® and Hevylite® methods are used to monitor patients with MM and other hematological diseases. Ayliffe et al. found that Freelite® and Hevylite® methods are 90% sensitive and 98% specific.