Media Backgrounder

# Mantle Cell Lymphoma (MCL)

A rare and aggressive B-cell malignancy

### What is Mantle Cell Lymphoma?<sup>1,2</sup>

MCL affects the lymphatic system and is an aggressive form of blood cancer which originates from B cells, a type of white blood cell (lymphocyte)



MCL typically results from a malignant transformation of a B lymphocyte in the outer edge of a lymph node follicle (the mantle zone)



These malignant B cells usually manifest in the lymph nodes first, but can spread to other parts of the lymphatic and extralymphatic system where they may build up in large numbers. Malignant B cells can accumulate within the bone marrow, liver, spleen or bowel.

#### Signs and symptoms<sup>2,3</sup> Prevalence and patients<sup>1,4</sup> Swollen lymph nodes MCL is more prevalent in men **Recurrent fevers**, Excessive heavy sweating weight loss at night Liver and spleen enlargement Diarrhoea. abdominal pain Median age at diagnosis Median overall survival rate and nausea **Persistent fatigue** Diagnosis<sup>3</sup> Diagnosis and staging of MCL may include the following examinations: Unfortunately, due to its ability to grow aggressively and spread quickly, people with MCL are often diagnosed in the later stages of the disease **Physical examination** Blood and other laboratory tests **Biopsy** Imaging tests (X-rays or CT scans) **Staging**<sup>5</sup> The following stages are most often used to determine the extent of MCL: Stage II Stage III Stage IV Stage I Malignancy is in a single Malignancy in two separate Malignancy has spread above Widespread disease beyond and below the diaphragm, or lymph nodes/organs region/lymph node the lymph nodes affecting confined to one side of the lymph nodes above the organs including liver, bone diaphragm diaphragm with involvement marrow or lungs of the spleen Treatment\*6,7,8,9,10,11 MCL can be a challenging disease to treat. Many patients will relapse or become resistant to Patients commonly receive multiple treatments over the course of their disease treatment. MCL treatments have improved in recent years. However, MCL remains a serious and fatal

Chemotherapy

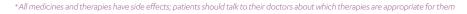


Radiation

therapy



Targeted non-chemo agents malignancy for which there is a high unmet need for new treatments. Many promising new therapies are currently being investigated.<sup>12</sup>



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### References

- Leukemia and Lymphoma Society. Mantle Cell Lymphoma Facts. Available from: http://www.lls.org/content/nationalcontent/resourcecenter/freeeducationmaterials/lymphoma/pdf/mantlecelllymphoma.pdf Accessed January 2015.
- 2 Cancer Research UK. What is mantle cell lymphoma. Available from: http://www.cancerresearchuk.org/cancer-help/type/non-hodgkins-lymphoma/about/types/mantle-cell-lymphoma. Accessed January 2015.
- 3 MacMillan Cancer Support. Mantle cell lymphoma. Available from http://www.macmillan.org.uk/Cancerinformation/Cancertypes/Lymphomanon-Hodgkin/TypesofNHL/Mantlecell.aspx Accessed January 2015.
- 4 Herrmann A et al. Improvement of overall survival in advanced stage mantle cell lymphoma. J Clin Oncol 2009; 27(4): 511-518.
- 5 National Cancer Institute. Stages of Adult Non-Hodgkin Lymphoma. Available from: http://www.cancer.gov/cancertopics/pdq/treatment/adult-non-hodgkins/Patient/page2 Accessed January 2015.
- 6 American Cancer Society. Chemo What it is, how it helps. Available from: http://www.cancer.org/treatment/treatmentsandsideeffects/treatmenttypes/chemotherapy/whatitishowithelps/chemo-what-it-is-questions-about-chemo Accessed January 2015.
- 7 Cancer Research UK. Steroid therapy for non-Hodgkins lymphoma. Available from: http://www.cancerresearchuk.org/cancer-help/type/non-hodgkins-lymphoma/treatment/steroid-therapy-for-non-hodgkins-lymphoma Accessed January 2015.
- 8 American Cancer Society. Radiation Therapy What it is, how it helps. Available from: http://www.cancer.org/acs/groups/cid/documents/webcontent/003299-pdf.pdf Accessed January 2015.
- 9 National Cancer Institute. Biological therapy. Available from: http://www.cancer.gov/cancertopics/treatment/biologicaltherapy Accessed: July 3, 2014.
- 10 American Cancer Society. Stem cell transplant. Available from http://www.cancer.org/acs/groups/cid/documents/webcontent/003215-pdf.pdf Accessed January 2015.
- 11 Alinari L, Christian B, Baiocchi R. Novel targeted therapies for mantle cell lymphoma. Oncotarget 2012;3:2
- 12 Cancer Research UK. Non-Hodgkin lymphoma: treatment. Available from: http://www.cancerresearchuk.org/cancer-help/type/non-hodgkins-lymphoma/treatment/types Accessed January 2015.

