

## Diagnosis

## Abnormal Plasma Cells

### [Abnormal Plasma Cell](#)

The bone marrow is a primary lymphoid organ where plasma cells haven't undergone class switching. A bone marrow lymphoma of plasma cells on bone marrow biopsy would show  $\geq 10\%$  of abnormal plasma cells which have not undergone class switching.

## Dutcher Bodies

### [Dutch-boy with Dutcher Bodies](#)

The abnormal plasma cells in Waldenstrom macroglobulinemia contain intranuclear, Periodic Schiff acid positive inclusion bodies called Dutcher bodies.

## Monoclonal IgM Antibodies

### [Monocle Mountain-goblin Ant-tie-body](#)

Plasma cells before isotype switching produce monoclonal IgM. The plasma cells seen in Waldenstrom Macroglobulinemia produce monoclonal IgM.

## Management

### Observation

#### [Observatory](#)

Waldenstrom Macroglobulinemia is an indolent disease of old age. So, to avoid over-treatment asymptomatic patients are kept under observation.

### Chemotherapy

#### [Chemo-head-wrap](#)

In symptomatic patients, Rituximab, Bruton tyrosine kinase inhibitors, or alkylating agents are used.

### Plasmapheresis

#### [Plasma-fairy](#)

To relieve the patient of hyperviscosity syndrome, IgM antibodies are filtered out of plasma using plasmapheresis.