

Rituximab maintenance in indolent lymphomas

Michele Ghielmini, M.D.

Some cancers, and in particular lymphomas, can be cured by a few cycles of chemotherapy. Some others are considered to be incurable and, after a first treatment which induces remission (induction treatment), patients can be either observed or receive a treatment to prolong the state of remission. This treatment is usually called "maintenance". Maintenance is therefore a treatment to be given to patients carrying non curable tumors.

In the past indolent lymphomas have been maintained with low-doses of chemotherapy or with repeated chemotherapy cycles at intervals longer than in induction. This has revealed to be too toxic. More recently Interferon alpha was given and was shown to be effective in prolonging the duration of remission but it finally did not prolong overall survival. Because Interferon is unpleasant to take, this was abandoned as well.

Since the advent of rituximab, a monoclonal anti-body which is almost deprived of side-effects, maintenance has become a topic again, particularly because rituximab has shown to be effective in prolonging remission in different types of indolent lymphomas, in particular follicular lymphoma. In this disease rituximab maintenance not only prolongs remission but it also prolongs overall survival.

The best schedule and duration of rituximab maintenance is still being studied as well as its' indication: although it is clear that in follicular lymphoma it should be given, in other types of indolent lymphomas, including Waldenströms macroglobulinemia, its' definitive role must still be defined.