The incidence of Non-Hodgkin Lymphoma (NHL) in patients older than 70 years is increasing during the last decade. Geriatric assessment objectives that older adults with NHL vary considerably in terms of performance status, comorbidities and functional reserve. The usual chemosensitivity of B NHL leads to prescription of an aggressive anthracycline chemotherapy regimen with rituximab.

Comprehensive geriatric assessment is the best way to identify the functional risks and disabilities of older patients with the aim of providing care and organizing longer-term follow-up. In some cancers M. Extermann identifies by the CRASH score the individual risk of severe toxicity from chemotherapy (1).

The object of this study was to establish the predict value of the interest of the CRASH score in a non selective French population with NHL.

Methods
We performed a retrospective, multicentric study on consecutive NHL patients treated by chemotherapy from June 2010 to March 2013 conducted in a regional network HEMATOLIM. Inclusion criteria

- 70 years old and over
- Histologically proved B NHL according to the guidelines of WHO
- Geriatric assessment according to the SIOG recommendations for CGA
- Available clinical and biological data
- CRASH score is evaluated before chemotherapy.
- CRASH points for toxicity of chemotherapy regimen were established using the chemotox table values, regimens not listed were scored by analogy (1).

Adverse events, grade 3 and over, up to 1 month after chemotherapy are observed in 48.6% of the cohort. These results are lower than the results published by M. Extermann and al (1), maybe because of the adapted chemotherapy regimen and of the comprehensive geriatric assessment (2).

In Limousin, a French region among the oldest in Europe, the therapeutic care of elderly patients (EP), aged over 70 years old with hematological malignancies, is structured in a college identified within a specialized network, GEREMATOLIM, part of our regional network HEMATOLIM.

This network gathers local hospitals around Limoges university hospital which is the referent pole.

Before 2008, the hematogeriatic care was empirically performed.

In 2009 a research project led to the creation of an abbreviated geriatric screening tool that was validated on the EP with hematologic pathology: e-GER-H7.

The progressive regionalization of this tool enabled a standardization of assessment practices within others hospitals.

For all patients, we report the online collection of the abbreviated e-GER-H7 geriatric screening data and of the comprehensive geriatric assessment (CGA) data included in e-GER-H7.

e-GER-H7 data also include administrative and hematological information.

e-GER-H7 data will enable an easier access to researches performed on these populations (like CRASH score).

e-GER-H7 data are consulted during multidisciplinary meetings, when the geriatrician is present or via video conference. These data are then available in parallel with those of the hematologic disease to choose the best treatment.

Patients characteristics (2)

- 8 patients had an intravenous regimen

CRASH Score

Global results

CRASH Score (n) 50

CRASH Score (n) 41

Before 2008, the hemato-geriatric care was empirically performed.

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As the geriatrician is present or via video conference, these data are then available in parallel with those of the hematologic disease to choose the best treatment.

Conclusions

- Crash score is High in 32.4% in our cohort of very old patients (median age 81.6) with Non Hodgkin Lymphoma mainly due to hematologic risk factor (Int-High 64.7%) more than non-hematologic (High 24.3%) risk factor.

- CRASH Score, Non Hematologic and Hematologic Risk Factor suggest frailty and risk of toxicity. Adverse effects after chemotherapy are observed in 46.6% of the cohort. These results are lower than the results published by M. Extermann and al (1), maybe because of the adapted chemotherapy regimen and of the comprehensive geriatric care.

- Those results have to be confirmed in a prospective multicentric study network.

References
(1) Predicting the risk of chemotherapy toxicity in older patients: The Chemotherapy Risk Assessment Scale for High-Age Patients (CRASH) score. Cancer 2013; 121:1649-1657.
(4) Predicting the risk of chemotherapy toxicity in older patients: The Chemotherapy Risk Assessment Scale for High-Age Patients (CRASH) score.