

# Cutaneous lymphomas: update of laboratory diagnosis.

M. Alaibac, E. Tonin, A. Peserico, C. Veller-Fornasa

## SUMMARY

The term primary cutaneous lymphomas designates a heterogeneous group of lymphoproliferative disorders arising from skin-homing T and B cells. The European Organization for Research and Treatment of Cancer (EORTC) classification for primary cutaneous lymphomas recognizes a limited number of cutaneous T-cell lymphomas and cutaneous B-cell lymphomas and provides a working classification for cutaneous lymphomas. Herein, the diagnostic procedures for the diagnoses of cutaneous lymphomas are discussed. Recent developments regarding immunophenotyping and immunogenotyping of cutaneous T-cell lymphomas and cutaneous B-cell lymphomas recognized in the EORTC classification are presented.

## KEY WORDS

cutaneous lymphomas, T cell, B cell, classification, immunophenotyping, immunogenotyping, review

The term primary cutaneous lymphomas designates a heterogeneous group of lymphoproliferative disorders arising from skin-homing T and B cells which present in the skin with no evidence of extracutaneous disease at the time of diagnosis and six months thereafter (1-3). They are after the group of gastrointestinal lymphomas the second most common group of extranodal non-Hodgkin lymphomas with an annual incidence of 1-1.5/100,000.

### Classification.

The European Organization for Research and Treatment of Cancer Classification (EORTC) uses a combination of clinical, histological, immunophenotypic, and molecular biological characteristics and provides a

working classification for cutaneous lymphomas (Table I) (4). The diagnosis of cutaneous lymphomas is made by recognizing the clinical manifestations and is supported by laboratory tests. Immunophenotyping (immunologic analysis of cellular antigen expression) and immunogenotyping (molecular biology analysis of antigen receptor genes) support the conventional clinical and histopathologic analyses.

### Immunophenotyping of cutaneous lymphomas.

The distinction between cutaneous lymphomas and non-lymphoid tumors of the skin is a common problem. The most useful immunohistochemical marker in

