what does the future hold for CLL patients?

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Guidelines for diagnosis, indications for treatment, response assessment and supportive management of chronic lymphocytic leukemia

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at diagnosis

	General practice	Clinical trial
Complete blood count and differential count	Always	Always
Immunophenotyping of peripheral blood lymphocytes	Always	Always

before treatment

	General practice	Clinical trial
History, physical examination, performance status	Always	Always
Complete blood count and differential count	Always	Always
Marrow aspirate and biopsy	When clinically indicated (cytopenia)	desirable
Serum chemistry, serum immunoglobulin, Coombs	Always	Always
Chest radiograph	Always	Always
Infectious disease status	Always	Always

before treatment
classic karyotype

	General practice	Clinical trial
Conventional karyotyping in peripheral blood lymphocytes (with specific stimulation)	not generally indicated	Desirable

conventional karyotyping in peripheral blood lymphocytes (with specific stimulation) may be useful prior to therapy, if established methodology is available

before treatment
FISH

	General practice	Clinical trial
FISH for del(13q), del(11q), del(17p), add(12) in peripheral blood lymphocytes	Always	Always

before treatment
TP53 mutations

	General practice	Clinical trial
TP53 mutations	Always	Always

before treatment
IG genes

	General practice	Clinical trial
IG genes	Always	Always

stereotyped subsets?

It seems that some of these stereotyped subgroups share a similar prognosis.

For example, IGHV3-21 gene usage (of stereotype subset 2) may be associated with an unfavorable prognosis independent of the IGHV mutational status.

As of today, assessment of IGHV stereotypes is not an element of the routine prognostic work up in CLL.

novel recurrent mutations?

Additional genomic abnormalities, such as mutations in NOTCH1 or SF3B1 that have pathogenic as well as prognostic significance.

However, more data from prospective trials are needed to validate the prognostic and predictive value of these genomic abnormalities before we can advocate using them in routine practice.

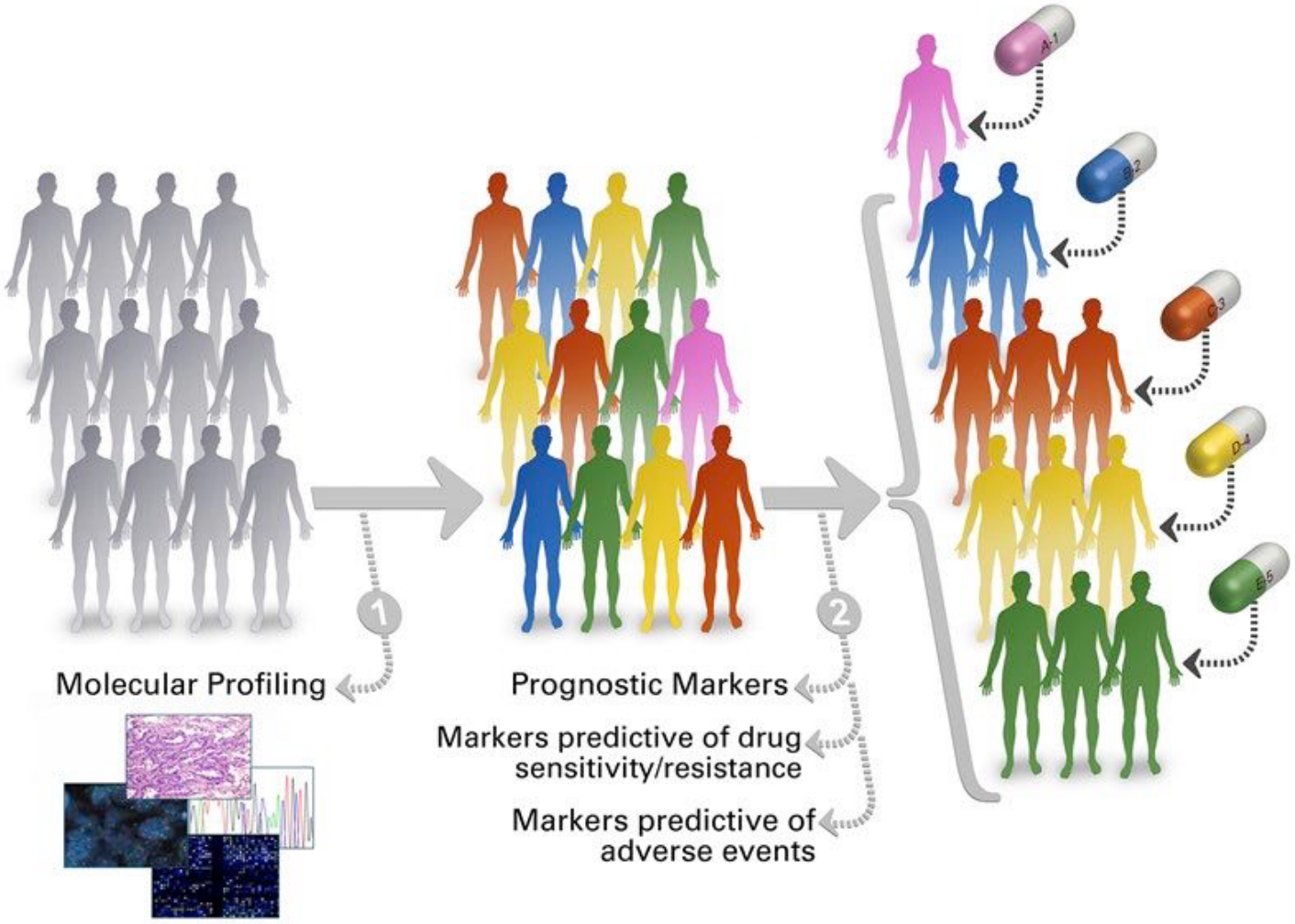
(not so) future directions

effective combinations of mechanism-based therapies

biomarker-assisted treatment decisions

Precision medicine in CLL

matching patient profiles with treatments

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