**Good prognosis**

**Bad prognosis**

**CLL with “Unmutated” BCR**

- **Extrinsic Factors**
  - BCR: autoreactivity and/or polyreactivity
  - ZAP-70: high
  - CD38: high
  - CD49d: high

- **Intrinsic factors**
  - Genetic damage

- **Acquisition of additional genetic abnormalities**

- **Aggressive phenotype**

- **High proliferation rate**
- **Low apoptotic rate**
- **Increased cell trafficking**

**CLL with “Mutated” BCR**

- **Extrinsic factors**
  - BCR “Mono” reactivity
  - ZAP-70: low
  - CD38: low
  - CD49d: low

- **Low proliferation rate**
- **Low apoptotic rate**

**B cell ("auto/polyreactive"??)**