

# CHEMOIMMUNOTHERAPY

In CLL, chemotherapy is almost always combined with immunotherapy, which increases how well it works. Chemotherapy by itself is rarely used to treat CLL.

Chemotherapy kills fast-growing leukemia cells but can also harm fast-growing healthy cells, causing side effects. With chemoimmunotherapy, you could experience both immunotherapy and/or chemotherapy side effects. However, most people do not experience all side effects. Be sure to tell your health care team about the side effects you have.

## GENERIC (AND BRAND) NAMES

## COMMON SIDE EFFECTS

### FCR COMBINATION

- fludarabine (Fludara®)
- cyclophosphamide (Cytosan®)

*Given by IV into vein with the immunotherapy, rituximab.*

*Used most often with patients younger than 70 in good overall health.*

- Low blood counts
- Nausea and vomiting
- Infection
- Fever

### Rare but serious side effects may include:

- Tumor lysis syndrome (which can cause kidney failure)

- chlorambucil (Leukeran®)

*Given by mouth as a tablet with the immunotherapy, obinutuzumab.*

*Used most often with patients 70+ or patients with other serious health issues.*

- Nausea and vomiting
- Abnormal levels on blood tests measuring liver function (these return to normal once treatment is stopped)
- Skin rash (a severe skin reaction is a rare but serious side effect)

- bendamustine (Bendeka®, Treanda®)

*Given by IV into vein with the immunotherapy, rituximab.*

*Used most often with patients 70+ or patients with other serious health issues.*

- Low blood counts
- Infection
- Anemia
- Bleeding and bruising

### Rare but serious side effects may include:

- Tumor lysis syndrome (which can cause kidney failure)
- Infertility