



Where **Science** Becomes **Hope**

# IS MRD AN IMPORTANT CLINICAL ENDPOINT IN FRONTLINE MANAGEMENT OF CLL?

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# Disclosures

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# FRONTLINE MANAGEMENT OF CLL: BTK INHIBITOR OR VENETOCLAX-BASED<sup>1</sup>

## Venetoclax + Obinutuzumab<sup>2</sup>

### Fixed duration

**Excellent responses:** 5-year PFS = 62.6%  
= 40.6% in del(17p)/TP53m  
mPFS = 76.2 months

**Side effects of note:** tumor lysis risk, neutropenia, infections, diarrhea

## Zanubrutinib<sup>3</sup> or Acalabrutinib +/- Obinutuzumab<sup>4</sup>

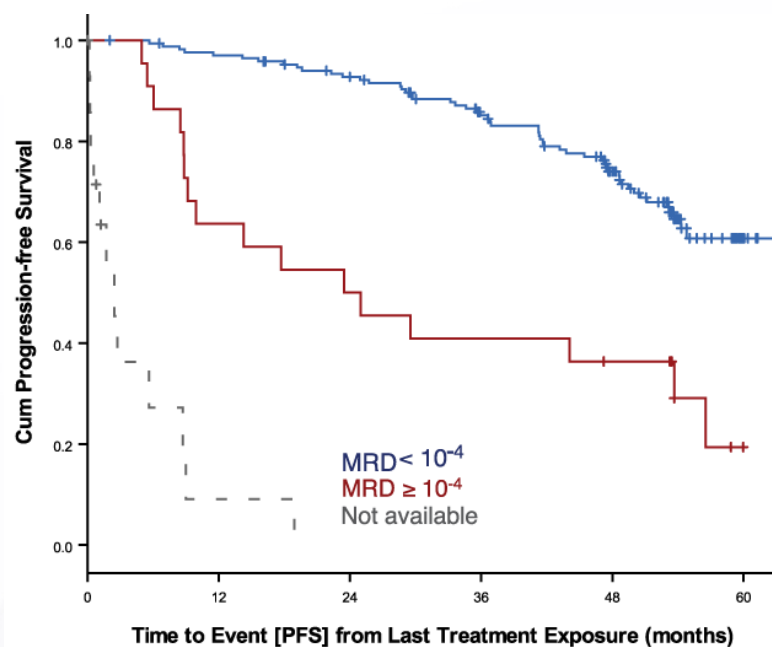
**Continuous treatment** until progression or intolerance

**Excellent responses:** Zanu mPFS = NR at median f/u 44 mos  
42-mo PFS = 82.4%  
= 79.4% in del(17p)  
A +/- O mPFS = NR at median f/u 74 mos  
= 73.1 mo/NR in del(17p)/TP53m  
6-year PFS = 78% / 62%  
= 56% in del(17p)/TP53m

**Side effects of note:** neutropenia, thrombocytopenia, hemorrhage, arthralgias, headache, hypertension, arrhythmias, rash

# IS MRD ASSOCIATED WITH OUTCOMES IN FRONTLINE CLL TREATMENT?

## Venetoclax + Obinutuzumab<sup>1</sup>



## BTKi

**CR is not necessary for durable disease control.**

**Zanu:** CR/CRi = 17.4% (14.5% in del(17p)<sup>2</sup>

uMRD not reported

**A +/- O:** CR/CRi 37% / 19%<sup>3</sup>

uMRD (only tested in patients with CR/CRi) = 13%<sup>4</sup>



# IS MRD ASSOCIATED WITH OUTCOMES IN FRONTLINE CLL TREATMENT?

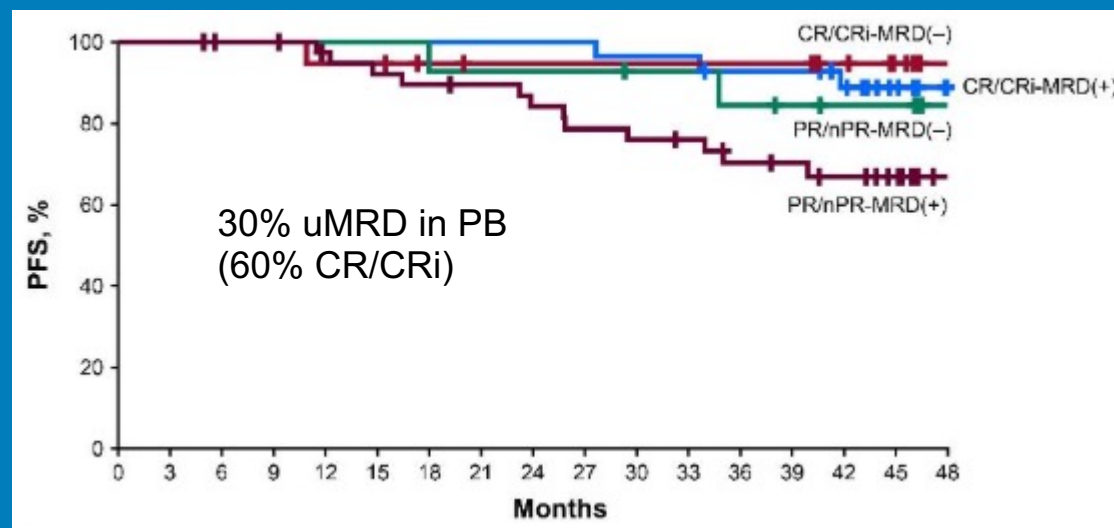
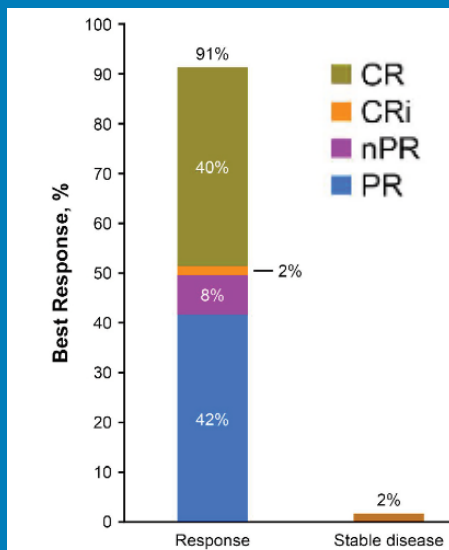
## BTKi

Do not frequently induce uMRD as single agents... or with anti-CD20

**E1912:** Ibrutinib + Rituximab<sup>1</sup>

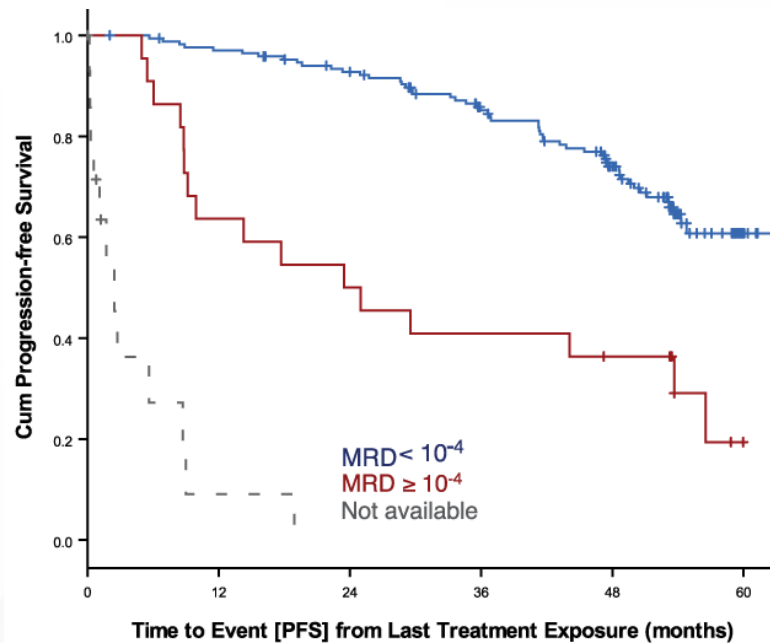
uMRD at 12 months: 8.3 %    5-year PFS = 78%

**iLLUMINATE:** Ibrutinib + Obinutuzumab<sup>2</sup>



# DOES MRD TESTING CHANGE MANAGEMENT AFTER FRONTLINE CLL TREATMENT?

## Venetoclax + Obinutuzumab



When your now-asymptomatic patient fails to achieve uMRD after treatment with VenO, do you...?

- A. Serially monitor MRD to determine when they will next need treatment
- B. Immediately start second-line therapy since VenO didn't work
- C. Counsel patient that average PFS is still ~2 years, so the plan is for active surveillance with (re)treatment upon meeting iwCLL criteria again

# WHAT ABOUT OTHER FIXED-DURATION REGIMENS IN FRONTLINE CLL?

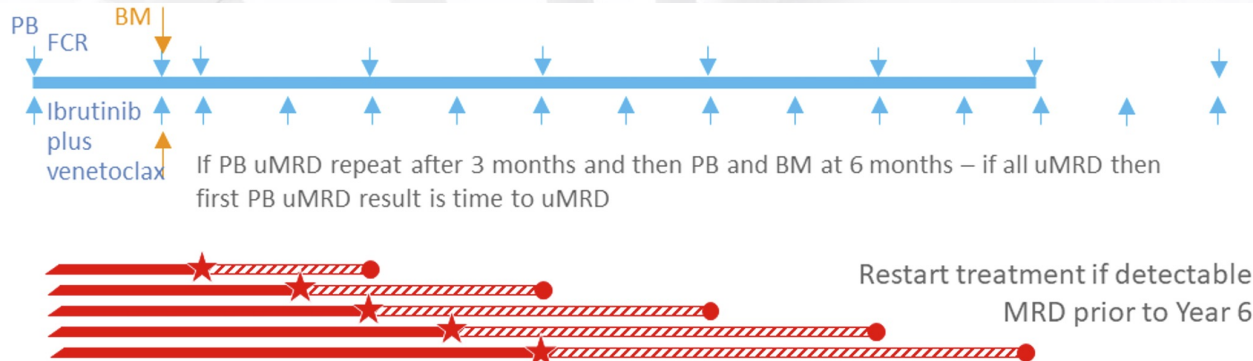
## • FCR?

SUGGESTED TREATMENT REGIMENS<sup>a,b,c,d</sup>  
CLL/SLL Without del(17p)/TP53 Mutation  
(alphabetical by category)

FIRST-LINE THERAPY <sup>e</sup>		
Preferred Regimens	Other Recommended Regimens	Useful in Certain Circumstances
<ul style="list-style-type: none"> <li>• Acalabrutinib<sup>f,g,*</sup> ± obinutuzumab (category 1)</li> <li>• Venetoclax<sup>f,h</sup> + obinutuzumab (category 1)</li> <li>• Zanubrutinib<sup>f,g,*</sup> (category 1)</li> </ul>	<ul style="list-style-type: none"> <li>• Ibrutinib<sup>f,g,i,*</sup> (category 1)</li> <li>• Ibrutinib<sup>f,g,*</sup> + obinutuzumab (category 2B)</li> <li>• Ibrutinib<sup>f,g,*</sup> + rituximab<sup>j</sup> (category 2B)</li> <li>• Ibrutinib<sup>f,g,*</sup> + venetoclax<sup>f,h</sup> (category 2B)</li> </ul>	<ul style="list-style-type: none"> <li>• Consider for IGHV-mutated CLL in patients aged &lt;65 y without significant comorbidities                             <ul style="list-style-type: none"> <li>▸ FCR (fludarabine, cyclophosphamide, rituximab)<sup>k,l</sup></li> </ul> </li> <li>• Consider when BTKi and venetoclax are not available or contraindicated or rapid disease debulking needed                             <ul style="list-style-type: none"> <li>▸ Bendamustine<sup>m</sup> + anti-CD20 mAb<sup>n,o</sup></li> <li>▸ Obinutuzumab ± chlorambucil<sup>p</sup></li> <li>▸ High-dose methylprednisolone (HDMP) + anti-CD20 mAb<sup>n</sup> (category 2B; category 3 for patients &lt;65 y without significant comorbidities)</li> </ul> </li> </ul>

## FLAIR: I+VenO vs. VenO vs. VenR vs. BR/FCR

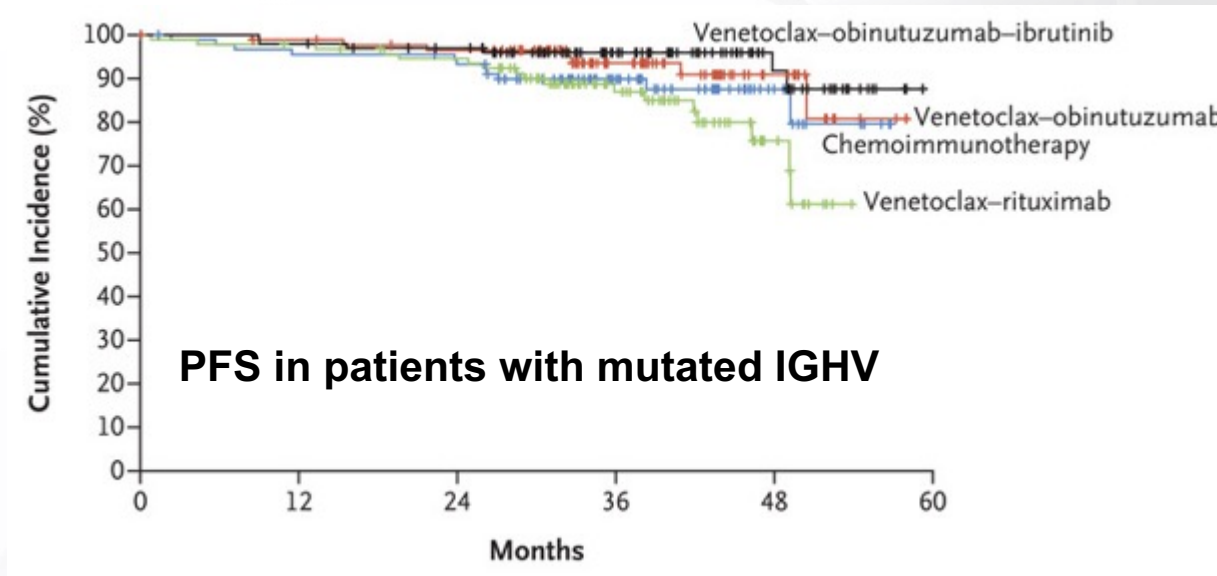
**Testing schedule**  
(Central lab, MRD flow, uMRD <1 CLL cell in 10<sup>4</sup>)



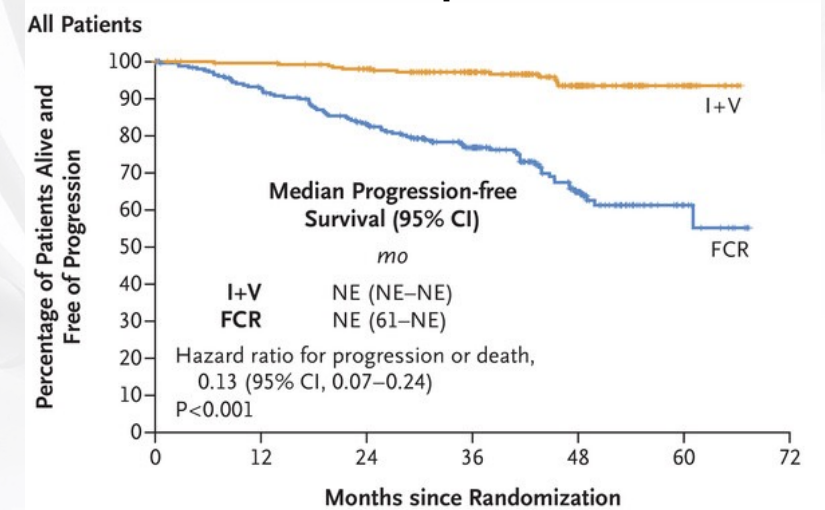
★ uMRD  
● Stop treatment

# WHAT ABOUT OTHER FIXED-DURATION REGIMENS IN FRONTLINE CLL?

FLAIR: I+V vs. VenO vs. VenR vs. BR/FCR



PFS in all patients

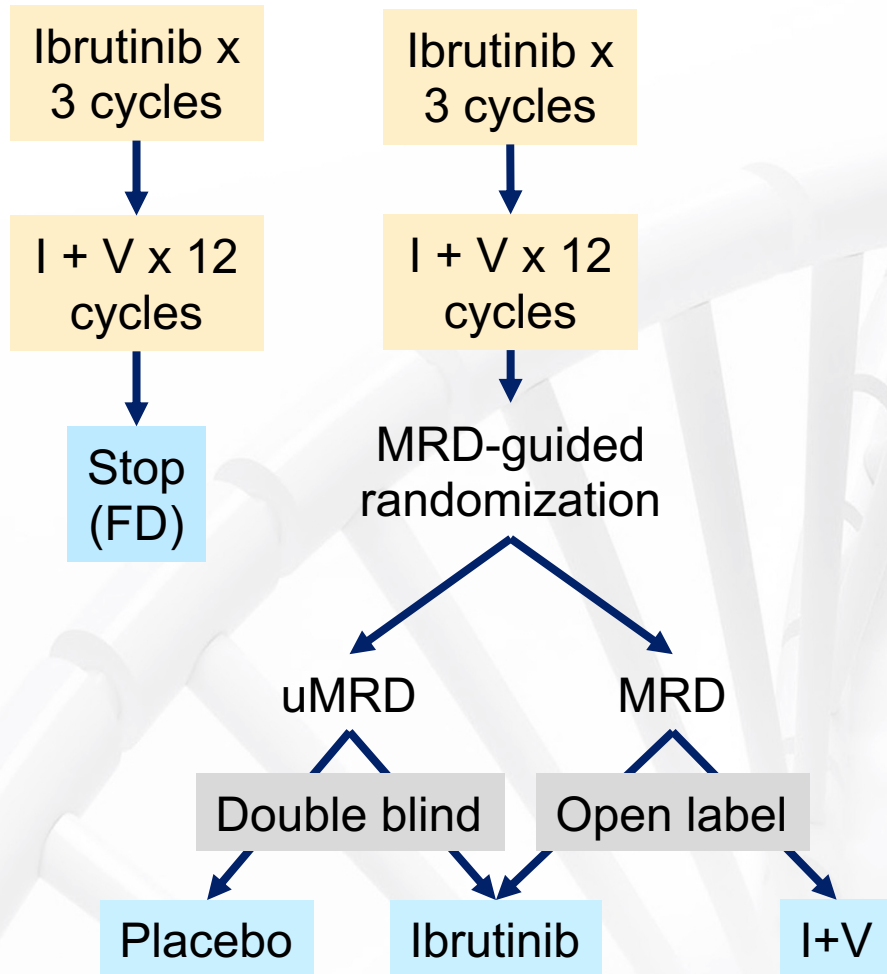


MRD-directed I+VenO showed similar PFS to VenO, regardless of subtype



# WHAT ABOUT NOVEL FIXED-DURATION REGIMENS IN FRONTLINE CLL?

## CAPTIVATE: phase 2, I+V fixed vs MRD-guided



- In FD arm, uMRD associated with better PFS
- In MRD-guided arms, MRD status could help determine best treatment strategy
- Until BTKi + Ven approved as frontline approach, this strategy is not applicable in routine clinical management

# CONCLUSIONS

- **MRD testing does not guide routine clinical management in frontline CLL treatment... yet.**
- uMRD is *not* an important clinical endpoint with continuous frontline cBTKi therapy.
- Achieving uMRD after fixed-duration VenO therapy is prognostic... but does not currently inform changes in management.
- **MRD testing is an essential component of ongoing and future trials in CLL:**
  - Clarify relationship between clinical response and end-of-treatment MRD status in a treatment-specific context
  - Examine uMRD as a potential surrogate endpoint
  - Identify candidates for MRD-driven changes in treatment duration or switches in therapy

## Current Experience with Measurable Residual Disease (MRD) in CLL



Prognostic for PFS and time to next treatment with some fixed-duration regimens

PFS correlated with U-MRD Rate:  
CLL14 (VO vs CO)  
CAPTIVATE (IV → IV VS I)  
CLL13 (CIT → VR vs VO vs VOI)  
MURANO (VR vs BR)  
TRANSCEND (CAR-T)

PFS Benefit Irrespective of U-MRD:  
GLOW (IV vs CO)  
ELEVATE-TN (A vs AO vs CO)  
E1912 (IR vs FCR)

Currently, no evidence that MRD-guided approach should be used outside of clinical trials

# QUESTIONS?

