



**HOT
NEWS**

IN HEMATOLOGY

Sindromi
linfoproliferative
ed oltre...

Caso Clinico 2: LLC

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MILANO

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HILTON MILAN

Disclosures of Lucia Farina

Company name	Research support	Employee	Consultant	Stockholder	Speakers bureau	Advisory board	Other
Janssen							x
AbbVie							x
AstraZeneca							x

CLINICAL CASE

- Male, born 1952
- Moderate IRC due to polycystic kidney
- June 2000: diagnosis of CLL, unknown IGH and FISH status



- **April-September 2006 (54 years old):** FC x 6 cycles → CR
- Treatment criteria not known

CLINICAL CASE

- **September 2012 (6 years after FC):** lymphocyte doubling time < 6 months and progressive adenopathies
- Patient is 60 years old, ECOG 0, CIRS 2 (HbsAg pos and IRC)
- At this time FISH was positive for del13q (negative for del11q, del17p, and try12) and IGH rearrangement was mutated (VH3-23 ID 97%)



- Treatment options in 2012:
repeating chemoimmunotherapy (FCR vs BR)?

CLINICAL CASE

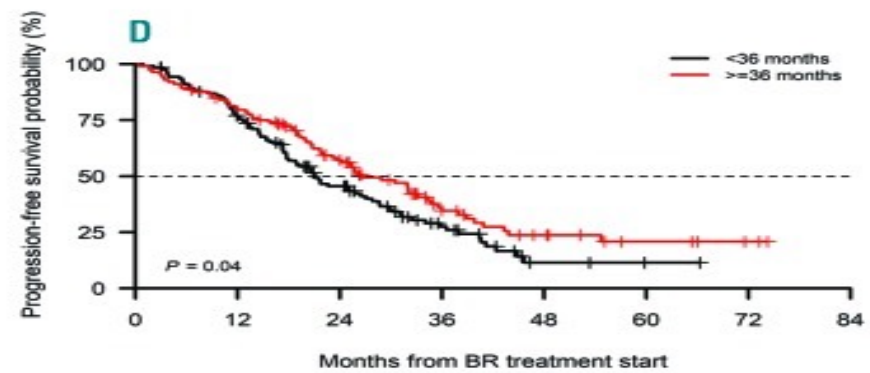
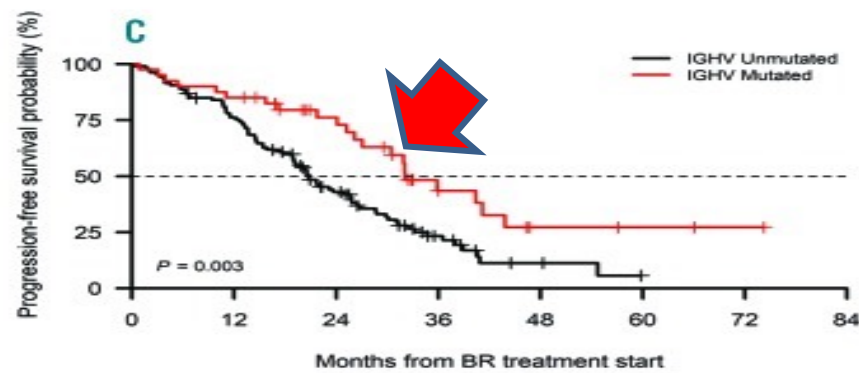
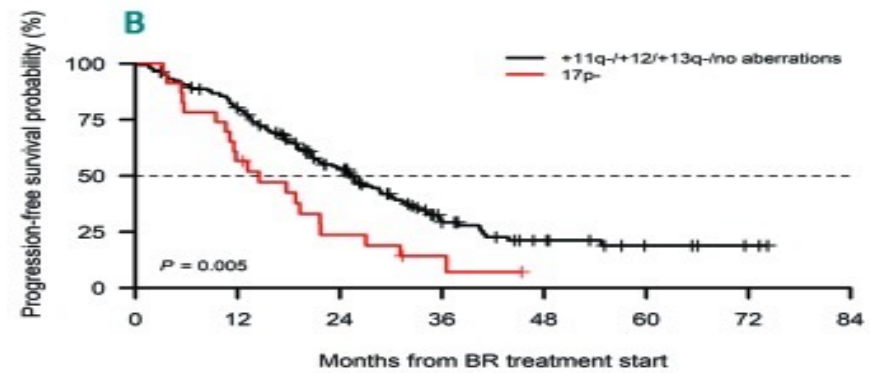
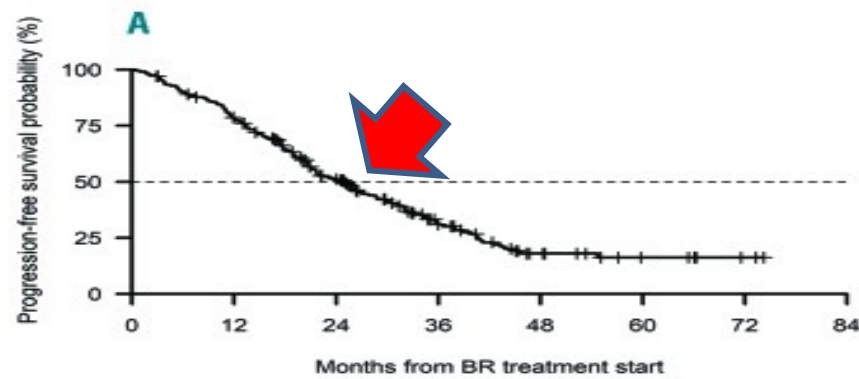
- **November 2012 to April 2013:** BR x 6 cycles (with tenofovir prophylaxis)



CR MRD pos by flow cytometry on PB

PFS after R-benda as second-line therapy

PFS



CLINICAL CASE

- **November 2015 (2 years-6 months after BR):**
lymphocyte doubling time < 6 months, anemia and thrombocytopenia
- Patient is 63 years old, ECOG 0, CIRS 2 (HbsAg pos and IRC)
- At this time FISH was negative for 17p deletion (TP53 mutation not performed)
- CT scan showed lymph nodes max 40 mm and progressively increasing and spleen was 13 cm by bipolar diameter



- Treatment options at that time:
ibrutinib vs idelalisib-rituximab?

CLINICAL CASE

- **December 2015:** the patient started idelalisib-rituximab



CLL best response → PR

Clinical course was complicated

by recurrent CMV reactivation (February 2017)

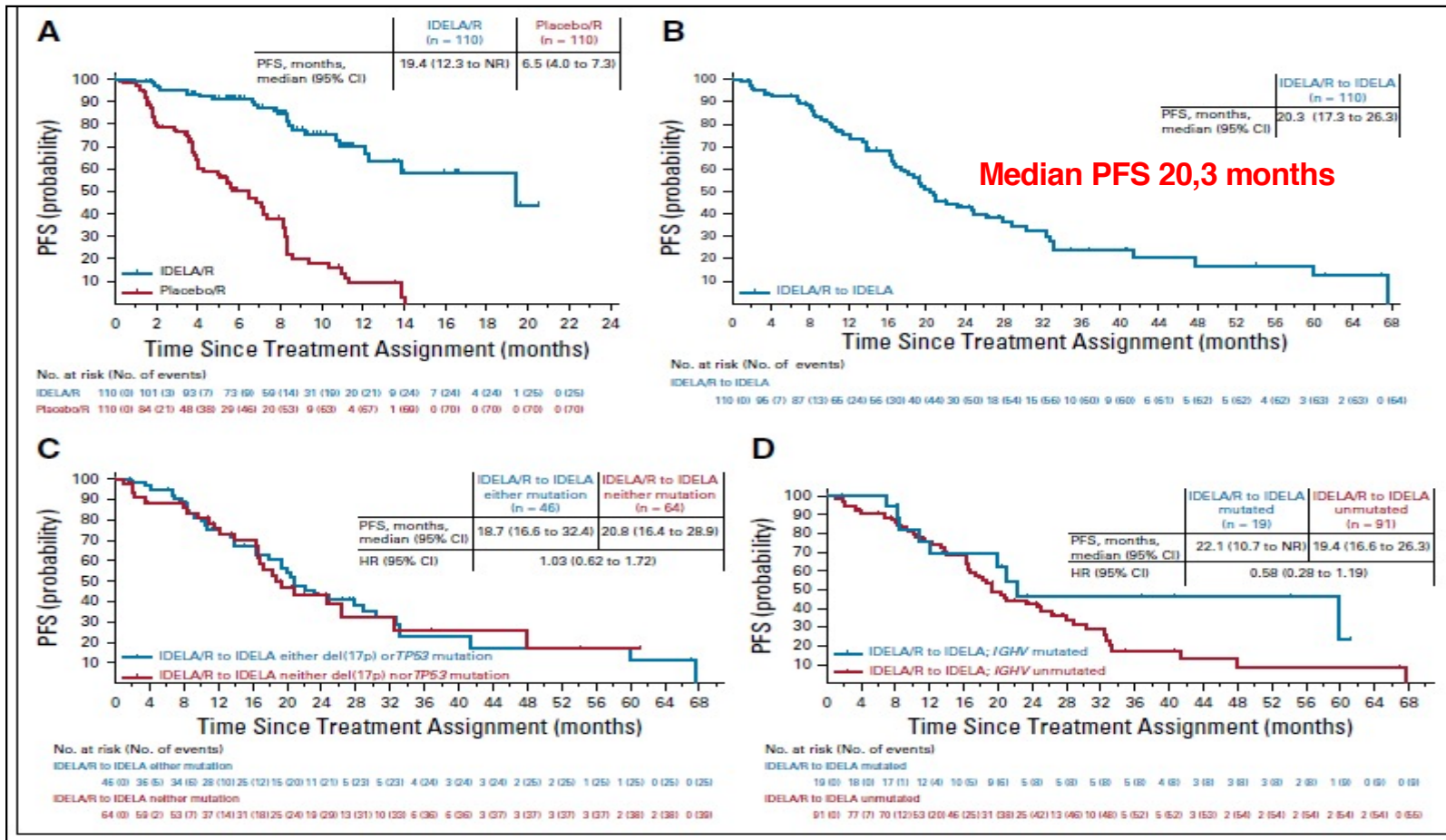
and grade 2-3 diarrhea (October 2017) treated with budesonide

CLINICAL CASE

Hospital admission in November 2019 because of grade 3 diarrhea:
histologic diagnosis con CMV colitis complicated by acute renal failure and bacterial pneumonia → **idelalisib definitely stopped 4 years after therapy start**

- Diarrhea and CMV reactivation persisted from November 2019 to March 2020
- Valgancyclovir was definitively stopped in May 2020
- Clinical course was complicated by ureteral calculosis with hydrourethrononephrosis

Idelalisib-rituximab: final results of a phase III study



Idelalisib-rituximab: final results of a phase III study

TABLE 2. Summary of Adverse Events

Adverse Event	No. (%) of Patients		
	Primary Study		Primary + Extension Studies
	IDEL/R (n = 110)*	Placebo/R (n = 108)*	IDEL/R-to-IDELA (n = 110)†
Summary			
Any	108 (98.2)	106 (98.1)	108 (98.2)
Grade \geq 3	81 (73.6)	58 (53.7)	100 (90.9)
Any study drug related	61 (55.5)	26 (24.1)	75 (68.2)
Study drug related grade \geq 3	36 (32.7)	8 (7.4)	52 (47.3)
Serious	65 (59.1)	43 (39.8)	89 (80.9)
Led to death	4 (3.6)	11 (10.2)	13 (11.8)‡
Infection or infestation			
Grade \geq 3 in \geq 5%§	36 (32.7)	25 (23.1)	59 (53.6)
Lower respiratory tract infection	16 (14.5)	12 (11.1)	26 (23.6)
Sepsis, bacteremia, viremia, and fungemia	11 (10.0)	5 (4.6)	19 (17.3)
Bacterial infection	3 (2.7)	3 (2.8)	8 (7.3)
Upper respiratory tract infection	1 (0.9)	2 (1.9)	6 (5.5)

CLINICAL CASE

- **June 2020 (7 months after idelalisib stop):** progressive adenopathy, anemia, thrombocytopenia and splenomegaly
- Patient is 68 years old, ECOG 0, CIRS 3 (HbsAg pos, IRC, calculosis, IPB)
- FISH positive for del13q, negative for del17p, del11q, try 12;
- PT53 not-mutated

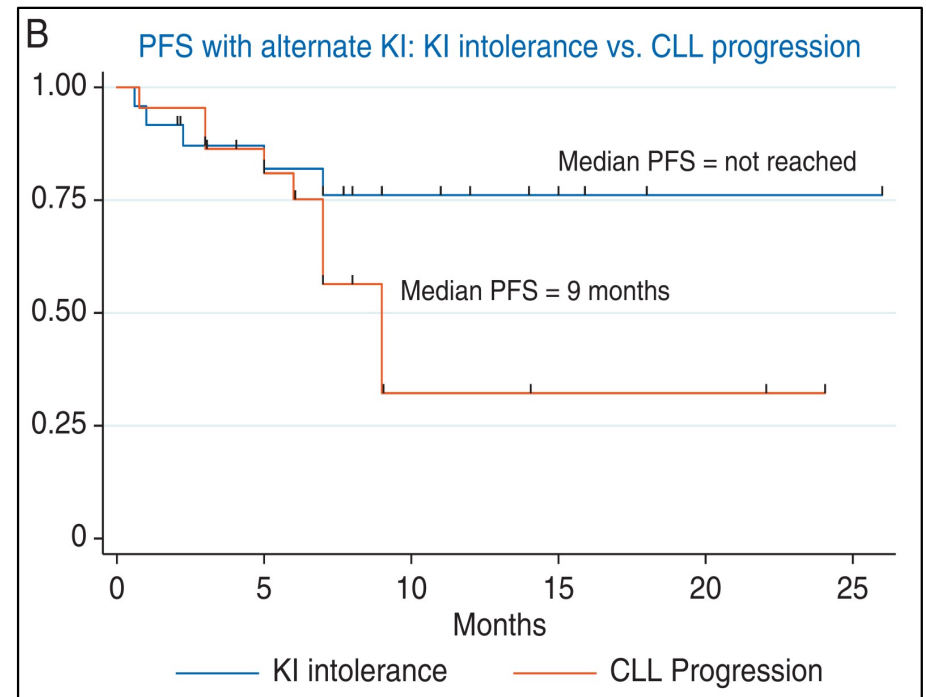
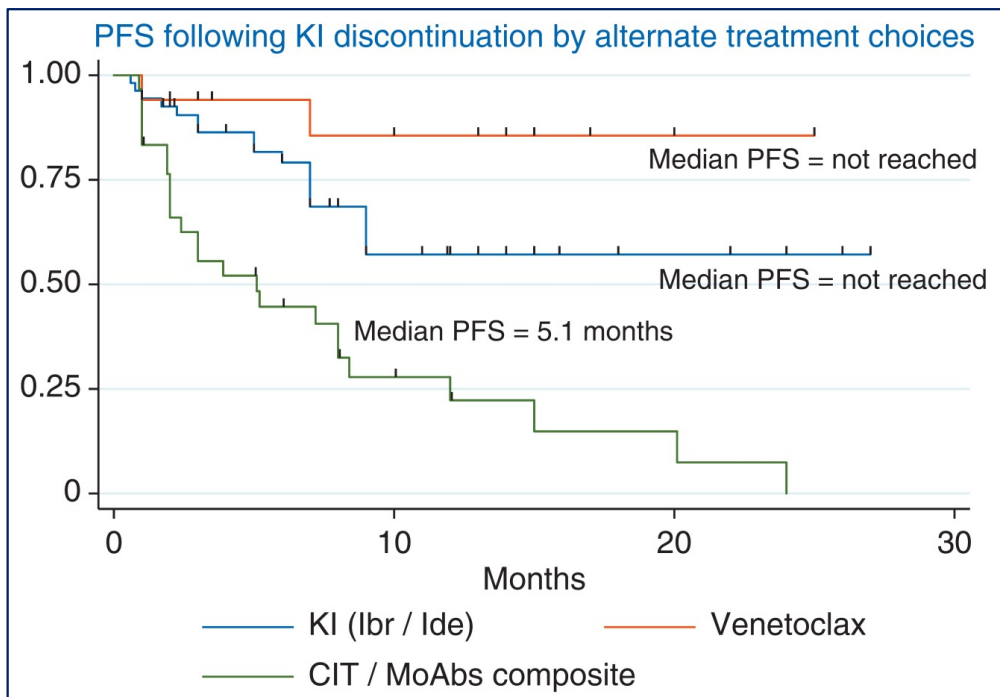


- Treatment options at this time:
ibrutinib vs venetoclax based therapy?

ORIGINAL ARTICLE

Optimal sequencing of ibrutinib, idelalisib, and venetoclax in chronic lymphocytic leukemia: results from a multicenter study of 683 patients

A. R. Mato^{1*}, B. T. Hill², N. Lamanna³, P. M. Barr⁴, C. S. Ujjani⁵, D. M. Brander⁶, C. Howlett^{7,8},



CLINICAL CASE

- **June 2020 (7 months after idelalisib stop): ibrutinib 420 mg daily was started** (after cardiac evaluation)
- July 2020: hemolytic anemia treated with steroids and Rituximab



- November 2020: therapy was temporary stopped due to grade 3 diarrhea (blood CMV-negative) combined with grade 2 nausea and arthralgia
- February 2021: therapy was temporary stopped due to COVID-negative pneumonia **and then restarted at 280 mg daily** (also due to the low compliance of the patient)

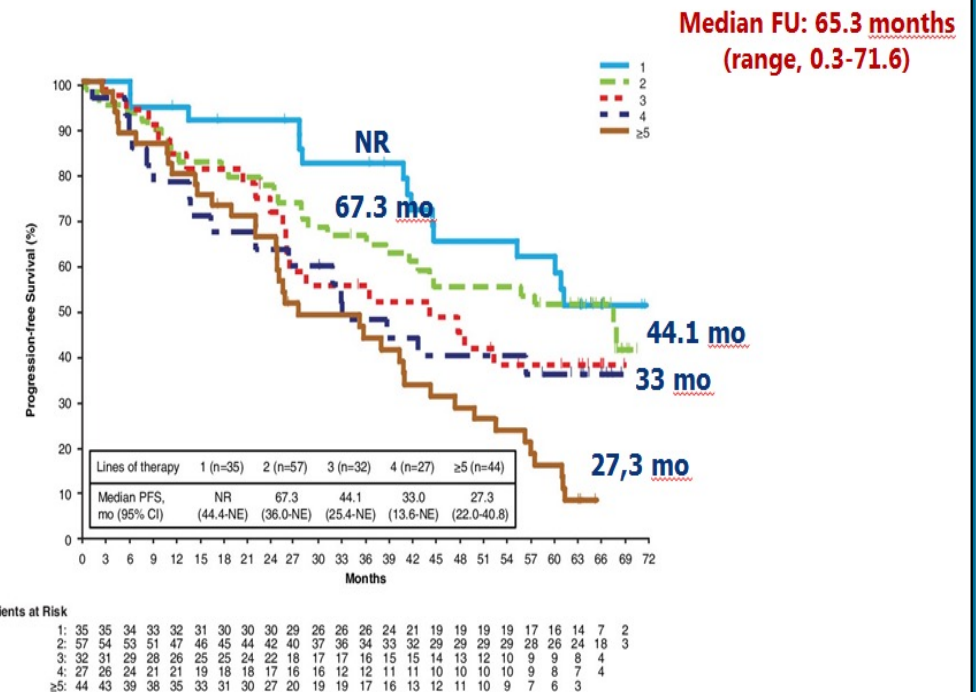
Final analysis of RESONATE: up to six year of follow-up in R/R CLL treated with ibrutinib

Median PFS decreased with the increase of the number previous lines of therapies:

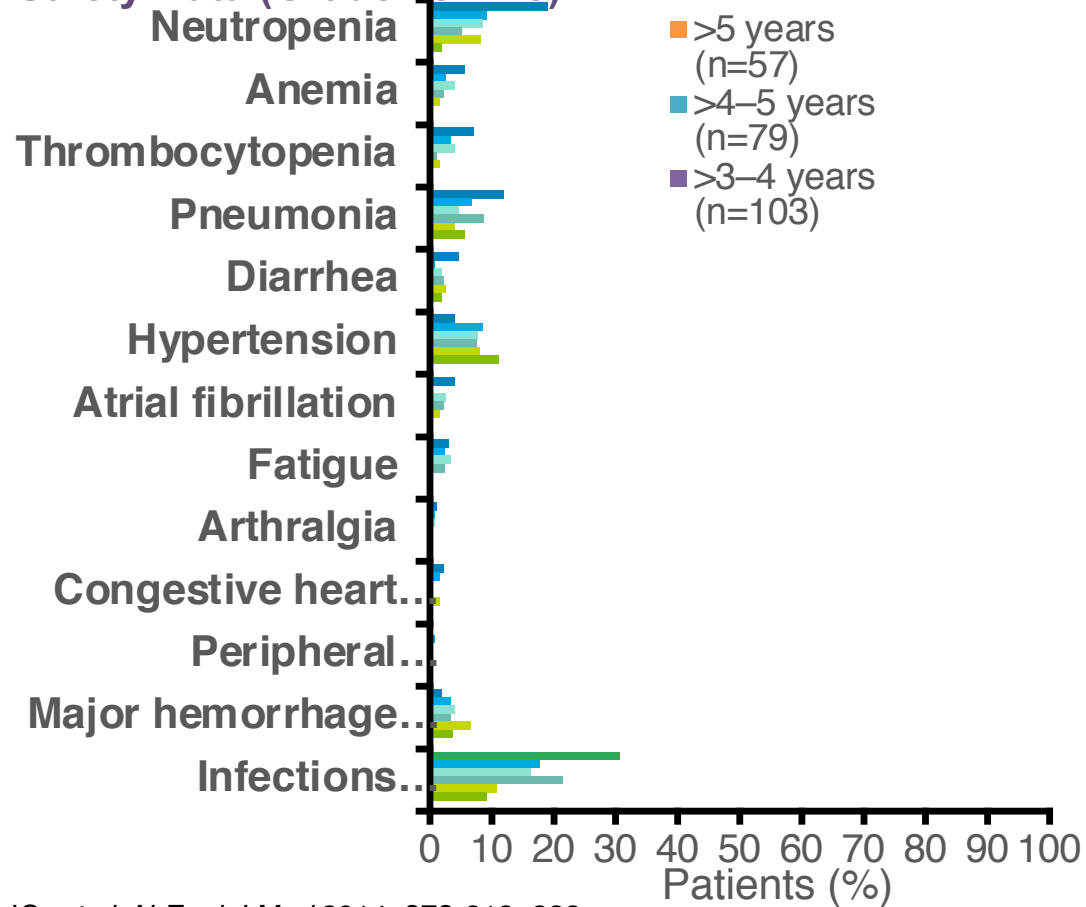
- NOT reached after 1 line
- 67 m after 2 lines
- 44 m after 3 lines
- 33 m after 4 lines

PFS may be reduced by NOT continuous therapy

Early ibrutinib use was more beneficial



- Median PFS by line of therapy was not reached in patients who received 1 prior line of therapy

Safety Data (Grade ≥ 3 AEs)

RESONATE:
65 months follow-up

1. Byrd JC, et al. *N Engl J Med* 2014; **372**:213–223;
2. Munir T, et al. *Am J Hematol* 2019; 2019; **94**:1353–1363;
3. Seymour JF, et al. *N Engl J Med* 2018; **378**:1107–1120 (including supplement).

CLINICAL CASE

- Best reponse with ibrutinib → PR after 22 months
- At the last follow-up patient is fine but lymphocytes are increasing after 22 months → increase ibrutinib to 420 mg daily



- Treatment options at this time:
Venetoclax monotherapy?

CLINICAL CASE

Conclusions

- CLL patients have many treatment options compared to the past
- Therapy sequencing may be crucial for the best management of the patient
- New inhibitors are not devoid of side effects and patient compliance may be an issue for continuous therapy in the long-term