

CORRESPONDENCE

## Upfront Lenalidomide in Follicular Lymphoma: Time has Come or Not?

Vikas Garg<sup>1</sup> · Ajay Gogia<sup>1</sup> · Gopila Gupta<sup>2</sup>

Received: 26 October 2018 / Accepted: 13 November 2018 / Published online: 17 November 2018  
© Indian Society of Hematology and Blood Transfusion 2018

Dear Editor,

We are very enthusiastic about recent phase 3 trial by Morschhauser et al. [1] to evaluate the superiority of Lenalidomide-Rituximab (R<sup>2</sup>) over Rituximab-chemotherapy (R-Chemo) in advanced untreated follicular lymphoma. We would like to emphasize few points. This was designed as a superiority trial, but the study did not meet its co-primary endpoints. CR/CRu and ORR (48% and 84%), are lower than phase 2 studies (87% and 98%) [2]. In R<sup>2</sup> arm lenalidomide was administered for 18 cycles, cost and long term toxicity seems a valid concern since median follow-up is too short for FL. Two phase 3 studies have demonstrated better tolerability and responses to Ben-

damustine-Rituximab (BR) than R-CHOP [3, 4]. In the current study, 50% patient received R-CHOP, which is not current standard and has a greater hematologic toxicity, neuropathy and alopecia (Table 1). In our experience, phase 3 randomized study, CR and ORR were 16.6% and 83.3% in R<sup>2</sup> and it was poorly tolerated [5]. Lenalidomide may be considered a new sword in armamentarium but warrants longer follow-up for a final verdict.

---

✉ Ajay Gogia  
ajaygogia@gmail.com

Vikas Garg  
vg18007@gmail.com

Gopila Gupta  
gopila.gupta805@gmail.com

<sup>1</sup> Department of Medical Oncology, Dr. B.R.A. IRCH All India Institute of Medical Sciences, Delhi, New Delhi, India

<sup>2</sup> Department of Hematology, All India Institute of Medical Sciences, Delhi, New Delhi, India

**Table 1** Response rates and toxicity profile in phase 3 studies of Follicular Lymphoma

	R <sup>2</sup> versus R-Chemo [1]	BR versus R-CHOP/R-CVP [3]	BR versus RCHOP [4]
CR (%)	48 versus 53	31 versus 25	40 versus 30
ORR (%)	61 versus 65	97 versus 91	93 versus 91
PFS	77% versus 78% (3 year)	NA	69.5 m versus 31.2 m
Neutropenia <sup>a</sup> (%)	32 versus 50	39 versus 87 <sup>c</sup>	29 versus 69
Neuropathy <sup>b</sup> (%)	7 versus 16	09 versus 44 <sup>c</sup>	7 versus 29
Alopecia <sup>b</sup> (%)	1 versus 9	04 versus 51 <sup>c</sup>	0 versus 100
Vomiting <sup>b</sup> (%)	7 versus 19	29 versus 13 <sup>c</sup>	NA
Skin toxicity <sup>b</sup> (%)	43 versus 24	20 versus 12 <sup>c</sup>	31 versus 15

NA Not Available, CR Complete response, ORR Overall response rate, PFS Progression free survival

<sup>a</sup>Grade 3 and 4 toxicity, <sup>b</sup>All Grade toxicity, <sup>c</sup>Includes toxicity due to R-CHOP only

## References

- Morschhauser F, Fowler NH, Feugier P et al (2018) Rituximab plus Lenalidomide in Advanced Untreated Follicular Lymphoma. *N Engl J Med* 379:934–947
- Fowler NH, Davis RE, Rawal S et al (2014) Safety and activity of lenalidomide and rituximab in untreated indolent lymphoma: an open-label, phase 2 trial. *Lancet Oncol* 15:1311–1318
- Flinn IW, van der Jagt R, Kahl BS et al (2014) Randomized trial of bendamustine rituximab or R-CHOP/R-CVP in first-line treatment of indolent NHL or MCL: the BRIGHT study. *Blood* 123:2944–2952
- Rummel MJ, Niederle N, Maschmeyer G et al (2013) Bendamustine plus rituximab versus CHOP plus rituximab as first-line treatment for patients with indolent and mantle-cell lymphomas: an open-label multicentre, randomised, phase 3 noninferiority trial. *Lancet* 381:1203–1210
- Paikaray SK, Gogia A, Kumar A et al (2018) A phase III open label randomized study to compare the efficacy of lenalidomide-rituximab vs bendamustine-rituximab in treatment naive follicular lymphoma [Abstract]. *J Clin Oncol* 36(Suppl 15):e19552