Switch to nilotinib versus continued imatinib in patients (pts) with chronic myeloid leukemia in chronic phase (CML-CP) with detectable BCR-ABL after 2 or more years on imatinib: ENESTcmr 12-month (mo) follow-up.

2012 ASCO Annual Meeting. Oral Abstract Session. Presented Monday, June 4, 2012

Authors:

Jeffrey Howard Lipton, Timothy P. Hughes, Brian Leber, Carmino De Souza, Pedro E Dorlhiac-Llacer, **Juan Luis Steegmann**, Agnes Guerci-Bresler, Anthony P. Schwarer, **Francisco Cervantes**, John Reynolds, LaTonya R Collins, Tomasz K. Szczudlo, Nelson Spector; Princess Margaret Hospital, Toronto, ON, Canada; SA Pathology, Adelaide, Australia; McMaster University, Hamilton, ON, Canada; University of Campinas - Hemocentro, Sao Pablo, Brazil; Hospital das Clinicas FMUSP, Sao Paulo, Brazil; Hospital de la Princesa, Madrid, Spain; CHU de Nancy - Hopitaux de Brabois, Vandoeuvre, France; Alfred Hospital, Melbourne, Australia; Hospital Clínic, Barcelona, Spain; Novartis Oncology, Basel, Switzerland; Novartis Pharmaceuticals, Florham Park, NJ; Novartis Oncology, East Hanover, NJ; Universidade Federal do Rio de Janeiro, Rio de Janeiro, BrazilView Less

Abstract Disclosures

Research Funding:

None

Background: Nilotinib induced significantly faster and deeper molecular responses vs imatinib in the ENESTnd trial. Achieving these deeper molecular responses may increase patient eligibility for future TKI discontinuation studies.**Methods:**CML-CP pts (N = 207) who achieved a complete cytogenetic response but were still BCR-ABL positive by RQ-PCR after ≥ 24 mo on imatinib were randomized 1:1 to receive nilotinib 400 mg BID (n = 104) or to continue their imatinib dose (400 or 600 mg QD [n = 103]). The primary endpoint was confirmed CMR (undetectable BCR-ABL by RQ-PCR with a sample sensitivity of ≥ 4.5 logs in 2 consecutive samples). Other endpoints included molecular responses (MMR ≤ 0.1%^{IS}, MR^{4} ≤ 0.01%^{IS}, and MR$^{4.5}$ ≤ 0.0032%^{IS}) and BCR-ABL ratio over time.**Results:**Rate of confirmed CMR was higher in the nilotinib arm vs imatinib by 12 mo (12.5% vs 5.8%) (Table). Rate of CMR (undetectable BCR-ABL in at least 1 sample) by 12 mo was significantly higher on nilotinib vs imatinib (23.1% vs 10.7%; *P* = .02). Rates of MMR, MR^{4}, MR$^{4.5}$, and CMR were also superior in pts switched to nilotinib, and these pts had significantly shorter times to achieve these responses. Imatinib-treated pts had minimal evidence of improvement in molecular response vs a median 0.5-log reduction in BCR-ABL by 12 mo for the nilotinib cohort. With 12-mo follow-up, 84% of pts remained on nilotinib and 96% on imatinib. The nilotinib safety profile was consistent with prior studies. Both drugs were well

tolerated. **Conclusions:**Twice as many pts achieved deeper molecular responses after switching to nilotinib vs staying on imatinib.

		Nilotinib 400 mg BID (n = 104)	Imatinib 400 or 600 mg QD (n = 103)
Molecular response by 12 mo (ITT population), %			
	Confirmed CMR	12.5	5.8
		P = .108*	
	CMR	23.1	10.7
		P = .02*	
Molecular response by 12 mo (in pts without the response at baseline), %			
	MMR	n = 24	n = 28
		75.0	35.7
		P = .006**	
	MR[4]	n = 74	n = 78
		48.6	25.6
		P = .006**	
	MR[4.5]	n = 94	n = 91
		33.0	16.5
		P = .008**	
	CMR	n = 101	n = 100
		20.8	10.0
		P = .03**	

*Stratified Cochran-Mantel-Haenszel test. **Stratified log-rank test.