Degarelix improves suppression of ovarian function

Premenopausal women with breast cancer receiving neoadjuvant letrozole endocrine therapy could achieve faster and more durable ovarian function suppression with degarelix, a gonadotropin-releasing hormone (GnRH) antagonist, than with triptorelin, a GnRH agonist, according to a recent study.

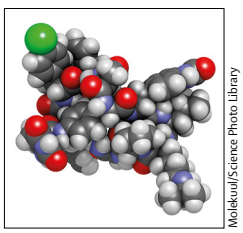
In the open-label, phase 2, TREND trial, Silvia Dellapasqua (European Institute of Oncology IRCCS, Milan, Italy) and colleagues enrolled 51 pre-menopausal women with histologically confirmed HER2-negative invasive breast cancer (stage cT2–4b, any nodal stage, M0), with oestrogen receptor and progesterone receptor expression greater than 50%. Patients were randomly assigned (1:1) to receive six 28-day treatment cycles of letrozole 2·5 mg per day orally, plus either triptorelin 3·75 mg intramuscularly on day 1 of every cycle (n=26) or degarelix 240 mg subcutaneously on day 1 of cycle 1, followed by 80 mg on day 1 of cycles 2–6 (n=25). The primary endpoint was the time to optimal ovarian function suppression (defined as time from the first injection of degarelix or triptorelin until the first occurrence of centrally assessed oestradiol concentrations ≤2·72 pg/mL).

All patients had optimal suppression of ovarian function by the end of the first cycle (29 days), but this was achieved three times faster in patients assigned to degarelix plus letrozole than in those who received triptorelin plus letrozole (median 3 days *vs* 14 days; hazard ratio 3·05, 95% CI 1·65–5·65; p<0·001). All patients in the degarelix group maintained optimal suppression of ovarian function during subsequent cycles, versus 84·6% in the triptorelin group. No grade 4 adverse events were reported and two grade 3 events (hypertension and anaemia) occurred in the letrozole plus triptorelin group.

"To our knowledge, this is the first report on the use of degarelix in the treatment of women with breast cancer," explained Dellapasqua. "Our data support additional studies to assess whether degarelix improves disease control compared with the current standard of care these patients."

"Degarelix broadens the repertoire of drugs that might be used for ovarian suppression in premenopausal women," said Lajos Pusztai (Yale School of Medicine, New Haven, CT, USA). "While it is unlikely that the more rapid achievement of ovarian suppression would result in any difference in long-term outcome, it may provide psychological advantages and a more convenient scheduling."

Elizabeth Gourd



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For the **study by Dellapasqua and colleagues** see *Proc Am Soc Clin Oncol*, 2018; published online Dec 27. DOI:10.1200/JCO.18. 00296