Reducing the Interval from Presynchronization to Initiation of Timed Artificial Insemination Improves Fertility in Dairy Cows. By Galvão et al., page 4212. Protocols for synchronization of ovulation are commonly used in reproductive management of lactating dairy cows to overcome inadequate detection of estrus. Reproductive responses are improved when cows are presynchronized with prostaglandin F₂α to initiate the timed insemination program during early to mid diestrus. When the interval between presynchronization and initiation of the timed insemination protocol was reduced from 14 to 11 d, ovulatory response to gonadotropin-releasing hormone and pregnancy per artificial insemination were improved.