Late Administration of Luteinizing Hormone-Releasing Hormone Agonists and Testosterone Levels >50 ng/dL in Prostate Cancer

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Background

- Maintaining T<20 ng/dL with ADT correlates with improved survival in advanced prostate cancer (PCa) patients[1]
- T levels may rise castrate level (<50 ng/dL) between administrations, especially if a subsequent dose is delayed
- Current study evaluated the **timeliness of LHRH administrations**, subsequent **rate of T breakthroughs**, and the **frequency of T and PSA tests** prior to administrations in PCa patients

Methods

- A retrospective review of electronic medical records from 1/1/07-6/30/16 of 85,030 LHRH agonist administrations for PCa treatment
- Definition of late by formulations

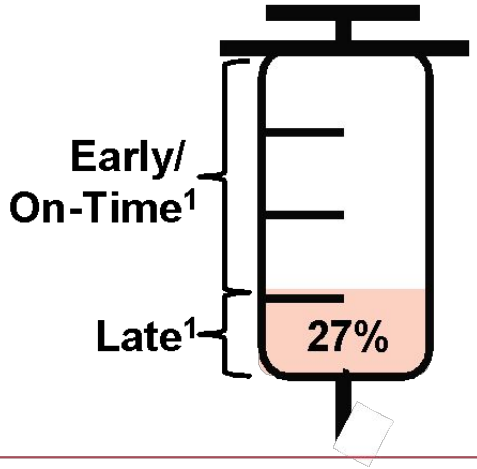
Formulation (Month)	Late Definition (Day)
1	≥33
3	≥98
4	≥129
6	≥195

1 Klotz L et al., *J Clin Oncol*. 2015.

Almost a Third of Administrations Were Late[1], Which Increased Frequency of Ineffective Castration; T Levels Were Not Monitored as Frequently as PSA

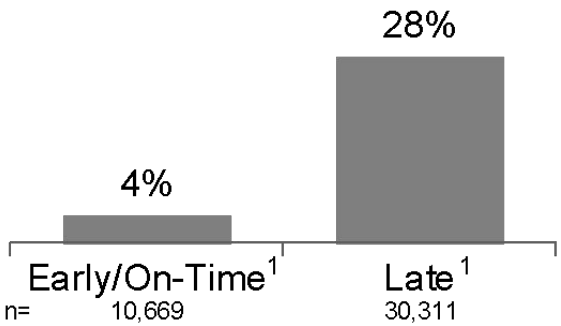
All Administrations

Proportion of Administrations by Early/On-Time[1] vs. Late[1]: Pooled LHRH Agonists (n=85,030)
Percent of Administrations



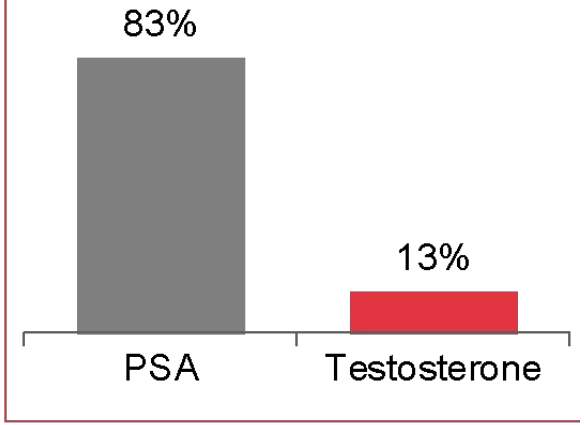
T >50 ng/dL

Proportion of T Tests with T >50ng/dL by Early/On-Time[1] vs. Late[1] T Tests: Pooled LHRH Agonists
Percent of T Tests



PSA/T Test

Proportion of Administrations with PSA vs. T Tests Prior to Administration: Pooled LHRH Agonists (n=85,030)
Percent of Administrations



DISCUSSION

Considering the presumed clinical benefits of suppressing T throughout ADT course, clinicians should administer treatments within approved dosing instructions, routinely monitor T levels, and prescribe treatments with proven efficacy through the dosing interval to maintain T<50 ng/dL

1 "Early/On-Time" if prior to, or "Late" if on/after day 33 (1M), 98 (3M), 129 (4M), or 195 (6M)
SOURCE: LHRH-ATTT Raw Data; Xelay Acumen Analysis; Updated as of 1/18/19