T E S T O S T E R O N E T H E R A P Y IN A D U L T M E N -- A N D R O G E N D E F IC IE N C Y S Y N D R O M E S

The Task Force used systematic reviews of available evidence to inform its key recommendations. The number 1indicates a strong recommendation and is associated with the phrase “we recommend”; 2 denotes a weak recommendation and is associated with the phrase “we suggest.” Evidence grading: denotes very low quality evidence; , low quality; , moderate quality; and , high quality. Numbers to the left of individual recommendations correspond to numbers in the text. Hence, there may be duplicate numbers below, and the order may not be strictly numerical. 1.

Diagnosis 1.1 We recommend making a diagnosis of androgen deficiency only in men with consistent symptoms and signs and unequivocally low serum testosterone levels. (1|) 1.1 We suggest the measurement of morning total testosterone level by a reliable assay as the initial test for the diagnosis of androgen deficiency in men. (2|) 1.1 We recommend confirmation of the diagnosis by repeating the measurement of morning total testosterone and in some patients by measurement of free or bioavailable testosterone level, using an appropriate assay system. (1|) 1.2.1 We recommend against screening for androgen deficiency in the general population. (1|) 1.2.2 We suggest that clinicians not use the available casefinding instruments for detection of androgen deficiency in men receiving health care for unrelated reasons. (2|) 1.2.2 We suggest that clinicians consider case detection by measurement of total testosterone levels in men with certain clinical disorders, listed in Table 3, in which the prevalence of low testosterone levels is high or for whom testosterone therapy is suggested/recommended in Section 2.0. (2|) 2.

Treatment 2.1 We recommend testosterone therapy for symptomatic men with the classical androgen deficiency syndromes who have low testosterone levels to induce and maintain secondary sex characteristics and to improve their sexual function, sense of well-being, muscle mass and strength, and bone mineral density. (1|) 2.2 Wesuggest that clinicians offer testosterone therapy to men with low testosterone levels and low libido to improve libido (2|) and to men with erectile dysfunction (ED) who have unequivocally low testosterone levels, after evaluation of underlying causes of ED and consideration of established therapies for ED. (2|) 2.3 We recommend against a general clinical policy of offering testosterone therapy to all older

men with low testosterone levels. (1|) 2.3 Wesuggest that clinicians consider offering testosterone therapy on an individualized basis to older men with consistently low testosterone levels on more than one occasion and significant symptoms of androgen deficiency, after appropriate discussion of the uncertainties of the risks and benefits of testosterone therapy in older men. (2|) 2.4.1 We suggest that clinicians consider short-term testosterone therapy as an adjunctive therapy in HIV-infected men with low testosterone levels and weight loss to promote weight maintenance and gains in lean body mass (LBM) and muscle strength. (2|) 2.4.2 We suggest that clinicians offer short-term testosterone therapy to men receiving high doses of glucocorticoids who have low testosterone levels to promote preservation of LBM and bone mineral density. (2|) 2.1 Werecommend against starting testosterone therapy in patients with breast (1|) or prostate cancer. (1|) 2.1 We recommend against starting testosterone therapy in patients with a palpable prostate nodule or induration, or prostate-specific antigen (PSA) greater than 3 ng/mL without further urological evaluation. (1|)