

Appendix Table. Literature Review on Megestrol Acetate

| First Author, Year | Sample Size | Study Type | Megestrol Dose (mg/day) | Patient Population | Outcomes | Brief Results Summary |
|------------------------------|-------------|-----------------------------|-------------------------|---|------------------------------|---|
| Castle, 1995 ¹ | 4 | Prospective | 400 | NH residents with cachexia without cancer | Weight | <ul style="list-style-type: none"> At 6 weeks, two patients gained weight (1.4 kg and 6.8 kg), two patients weight unchanged. |
| Raney, 2000 ² | 6 | Retrospective | 480 | NH residents with sustained weight loss of 5% in 1 month or 10% in 6 months | Weight | <ul style="list-style-type: none"> At month 2, significant increase in weight. 5 of 6 gained average of 2.65 kg. |
| Cicero, 2000 ³ | 14 | Retrospective | 400-800 | NH residents with weight loss, anorexia, and/or cachexia | Weight | <ul style="list-style-type: none"> At week 1-7, 40% lost average 2 kg. At week 4-14, 40% gained average of 3.1 kg. |
| Dickerson, 2002 ⁴ | 44 | Retrospective | 400-800 | SNF residents. Inclusion and exclusion criteria not well defined. | Weight | <ul style="list-style-type: none"> At months 1-6, mean weight loss, range -1.1 kg to -2.2 kg. |
| Kennedy, 2005 ⁵ | 57 | Retrospective | 120-800 | Elderly veterans without malignancy and/or AIDS | Weight | <ul style="list-style-type: none"> At 3 months, 53% gained average 4.6 kg and 47% lost average 7.2 kg. At 6 months, 38% gained average 6.2 kg and 59% lost average 5.9 kg. |
| Yeh, 2000 ⁶ | 69 | Randomized controlled trial | 800 | NH residents with weight loss of 5% in previous 3 months or 20% below ideal body weight without uncontrolled medical illness or life expectancy <6 months | Weight, Appetite, well-being | <ul style="list-style-type: none"> At week 20, significant increase in weight (2.45 vs -0.41 kg). At week 25, clinically significant weight gain (2.95 vs -0.45 kg). At week 12, self-reported appetite and sense of well-being increased. |

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|------------------------------|-----|-----------------------------|----------------------|--|--|---|
| Reuben, 2005 ⁷ | 47 | Randomized controlled trial | 200, 400, 800 | Patients post-acute hospital admission with skilled nursing services and self-reported decreased appetite without malignancy | Appetite, prealbumin, weight, functional status, QOL | <ul style="list-style-type: none"> At 3-6 weeks, appetite increased at 400mg and 800 mg doses. At 3-9 weeks, prealbumin increased at 400 mg and 800 mg. No significant difference in weight gain, functional status, QOL. |
| Sullivan, 2007 ⁸ | 29 | Randomized controlled trial | 800 | Veterans with illness-induced functional decline without malignancy, terminal illness, or inability for independent ambulation | Muscle strength, weight, body fat, intake | <p>Addition of megestrol to exercise regimen:</p> <ul style="list-style-type: none"> Significant decrease in muscle strength. Significant increase in weight, 3.2 kg vs 0.6 kg. Significant increase in body fat and intake. |
| Simmons, 2005 ⁹ | 17 | Prospective, non-blinded | 400 | NH residents who consistently ate less than 75% of meals | % of meals consumed, weight | <p>All patient received megestrol. Addition of optimal feeding assistance:</p> <ul style="list-style-type: none"> At week 4, significant Increase in % meal consumed. At week 9, no significant change in weight. 9 patients lost weight and 8 gained weight. |
| Bodenner, 2007 ¹⁰ | 709 | Retrospective, case-control | 20-2400 (median 486) | NH residents with 5% loss of total body weight in a 3-months or a 10% loss in a 6-months | Survival, Weight | <ul style="list-style-type: none"> Survival 23.9 months in Megestrol treated vs 31.2 months in controls. Not dose dependent. No significant difference in weight gain. |

NH – Nursing Home, SNF – Skilled Nursing Facility, RCT – Randomized controlled trial, QOL – quality of life

References:

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