## Comparison of Amitriptyline and US Food and Drug Administration— Approved Treatments for Fibromyalgia

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This research article seeks to answer the question as to which medications have the "highest efficacy and acceptability" for treating adults with fibromyalgia. The article finds that current medications differ in their effectiveness in treating specific fibromyalgia symptoms. Therefore clinicians should prescribe medications tailored to the person's individual symptom profile.

The study is based on a meta-analysis of 36 randomized clinical trials involving 11,930 fibromyalgia patients.

The medications compared in this Study were: milnacipran/Savella; duloxetine/Cymbalta; pregbalin/Lyrica. Of the wide variety of drugs available for the treatment of fibromyalgia, only these 3 are approved by the FDA. However, this Study found that off-label use of amytriptyline is effective for some of the major symptoms of fibromyalgia.

<u>For Pain</u>: "The study found that duloxetine was associated with the highest pain reduction; milnacipran with the lowest pain reduction; pregabalin also was mentioned as having effectiveness against pain."

<u>For Sleep:</u> Off-label use of amitriptyline had the highest effectiveness for sleep followed by pregabalin. Duloxetine was associated with the least improvement.

<u>For Depression:</u> "Duloxetine, pregabalin, and milnacipran were associated with improved depression. Amitriptyline was no better than a placebo against depression."

<u>For fatigue:</u> "All treatments were associated with improved fatigue, with amitriptyline associated with the greatest improvement followed by pregabalin. Milnacipran and duloxetine were associated with the least improvement."

Quality of Life: Depending on the specific dosage, amitriptyline, duloxetine, and pregabalin were associated with improved quality of life. Dosage of Milnacipran was not associated with improved quality of life.

<u>Important note:</u> The study compared medically-appropriate dosages for each medication for use with the major symptom groups. For the different symptoms, the effectiveness of a particular medication could be dosage dependent. As noted, within the Quality of Life category a particular medication might be more or less efficacious depending on the dosage.

One finding in the study is the effective use of off-label use of amitriptyline for sleep and fatigue symptoms, as well as quality of life.

A major finding of the Study is that different medications are more or less effective for the major symptom categories of fibromyalgia; and therefore clinicians should tailor medications for the patient's individual symptom profile.

Patients who have knowledgeable physicians may want to take this article for them to study. It may help the physician tailor medication to the patient's specific symptoms.

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Apart from the Study, a Treatment note: Clinicians also take into account an individual's medical conditions, medication interactions, contraindications, ongoing side-effects of a particular medication, as well as other considerations when choosing treatment.