

## St. John's Wort in the Treatment of Depression

### 1. How effective is St. John's Wort for the treatment of depression?

- St. John's Wort has become a popular herbal product promoted for the treatment of depression. Potentially active ingredients include hypericin, tannins, volatile oils, and flavonoids.<sup>1</sup> St. John's Wort inhibits monoamine oxidase (MAO) types A and B. It also stimulates GABA receptors and binds to serotonin (5HT1) receptors.<sup>2,3</sup>
- One meta-analysis found support for its efficacy in mild to moderate depression; however, it also cautioned that there were **several limitations that made data interpretation difficult** (e.g. short duration of study, small sample size, inconsistent classification of depression, broad dosage range).<sup>4</sup>
- More studies are needed to assess its efficacy and toxicity profile.

### 2. What precautions should be observed when using St. John's Wort?

#### Side Effects:

- Pooled data from six studies suggest that side effects occur in about 20% of patients.<sup>4</sup>
- Side effects include: insomnia, stomach upset, dizziness, tiredness, photosensitivity, and itching.<sup>2</sup>

#### Drug/Food Interactions:<sup>4</sup>

- Serotonin reuptake inhibitors, buspirone (Buspar®), dihydroergotamine, lithium, L-dopa, opioids, selegiline, sumatriptan (Imitrex®) → **risk of serotonin syndrome** (excitement, sweating, rigidity, fever, rapid heart rate, dizziness)
- Decongestants, stimulants, other antidepressants, tyramine containing foods (some cheeses, yeast, wines, etc.) → **risk of hypertensive crisis** (sudden, life threatening rise in blood pressure)

#### Other Contraindications:

- Pregnancy

#### Product Variation:

- Wide variations in components do occur as product ingredients have not been standardized.

### Summary

There is limited data about the efficacy and safety of St. John's Wort in the treatment of depression. First line antidepressants such as SSRIs have much better data and are preferred. If St. John's Wort is used, patients should be cautioned regarding the potential interactions with certain foods and drugs. Self medication management for a condition such as depression is also discouraged.

#### References:

1. Review of Natural Products. St. Louis: Facts and Comparisons, 1996.
2. Pharmacopsychiat 1997;30(suppl):108-112.
3. Hosp Pharm 1997;32:1621-1632.
4. BMJ 1996;313:253-58.