Pharmacological Treatments: Managing Sexual Interest/Arousal Disorder (SIAD)

Key Information for Healthcare Providers

What is SIAD?

Sexual Interest/Arousal Disorder (SIAD) is defined as a **persistent or recurrent lack of sexual desire that causes personal distress or difficulty in relationships.**[1]

Identifying candidates for pharmacotherapy

Pharmacotherapy may be considered when the patient has **acquired SIAD** (developed after a period of normal sexual desire) that is **distressing** and not explained by other factors.

Quick screen, check all that apply

- ❑ Persistent low sexual desire
- ❑ Distress or relationship difficulty present
- ❑ Not explained by another illness (e.g. psychiatric condition)
- ❑ Not explained by medication or substance use
- ❑ Not explained by relationship/life stressors
- ❑ Shared decision making completed
- ❑ Not explained by pregnancy, postpartum, or menopausal symptoms
- ❑ Not explained by other sexual problems (pain, arousal, orgasm difficulties)
- ❑ Not explained by partner's sexual problems

Approved pharmacological treatments

Two medications are currently approved by **Health Canada** and the **U.S. Food and Drug Administration (FDA)** for the treatment of acquired SIAD in premenopause and they work by targeting central mechanisms in the brain to enhance sexual desire and reduce associated distress.

1. Flibanserin (Addyi®)

- **Mechanism:** Mixed serotonin agonist and antagonist, which increases dopamine and norepinephrine levels.
- **Indication:** Premenopausal individuals with acquired, generalized SIAD
- **Dosage:** 100 mg tablets taken orally at bedtime. Discontinue use after 8 weeks if no improvement
- **Contraindications:** Liver impairment or those taking moderate to strong CYP3A4 inhibitors.
- **Side effects:** Dizziness, sleepiness, nausea.
- **Efficacy:** RCTs show statistically significant but modest improvements in desire, sexually satisfying events, and reduced distress over 24 weeks. Some patients find the benefit meaningful despite small effect size.

2. Bremelanotide (Vyleesi®)

Although Health Canada approved recently the company has stopped bremelanotide supply in Canada

- **Mechanism:** Stimulates melanocortin receptors in the brain leading to an increase in dopamine.
- **Indication:** Premenopausal individuals with acquired SIAD.
- **Dosage:** 1.75 mg subcutaneous injections given 45 minutes prior to anticipated sexual activity. Only one dose per 24 hours and no more than 8 doses per month is recommended.
- **Contraindications:** Uncontrolled hypertension and cardiovascular disease due to a transient increase in blood pressure
- **Side effects:** Nausea, flushing
- **Efficacy:** When compared to placebo RCTs demonstrated clinically significant but small improvements in sexual desire and associated distress.

Off-label hormone options

Transdermal Testosterone

Although not Health Canada / FDA approved use is supported by the **Global Consensus Position Statement (2019)** and the **ISSWSH clinical practice guidelines.**[2,3,4]

- **Dosage:** Proper dosing should keep testosterone levels in the premenopausal physiologic range.
  - Recommend using 1/10th the dose prescribed for men. Physicians can prescribe 5-10 mg of transdermal testosterone 1% per day,
- **Monitoring**
  - **Baseline tests:** Perform liver function and lipid profile before initiating treatment. Perform a baseline total testosterone and sex hormone binding globulin.
  - **Follow-up:** Check total testosterone levels at 3- 6 weeks and ensure no androgenic side effects. Adjust dose to achieve premenopausal range.
  - **Discontinue** if no benefit noted by 6 months. If benefit check total testosterone, lipids, liver function tests, CBC q 6-12 months.
- **Contraindications:** Androgenic alopecia and hormone sensitive cancers. Caution in liver disease and hyperlipidemia.
- **Side effects:** Androgenic side effects (acne, hair loss, hirsutism) rarely occur with premenopausal dosing.
- **Efficacy:** There is consistent evidence from placebo-controlled RCTs that transdermal testosterone therapy is more effective than placebo

Using testosterone implants or intramuscular injections to achieve supraphysiologic testosterone levels is not recommended.

Suggested visit flow

1. **Assess:** Confirm persistent, distressing low desire not explained by other causes
2. **Select treatment:**
   - Flibanserin (daily, premenopause)
   - Bremelanotide (on-demand, premenopause)
   - Testosterone (off-label, postmenopause)
3. **Safety check:** Contraindications, interactions, pregnancy status, baseline labs if needed

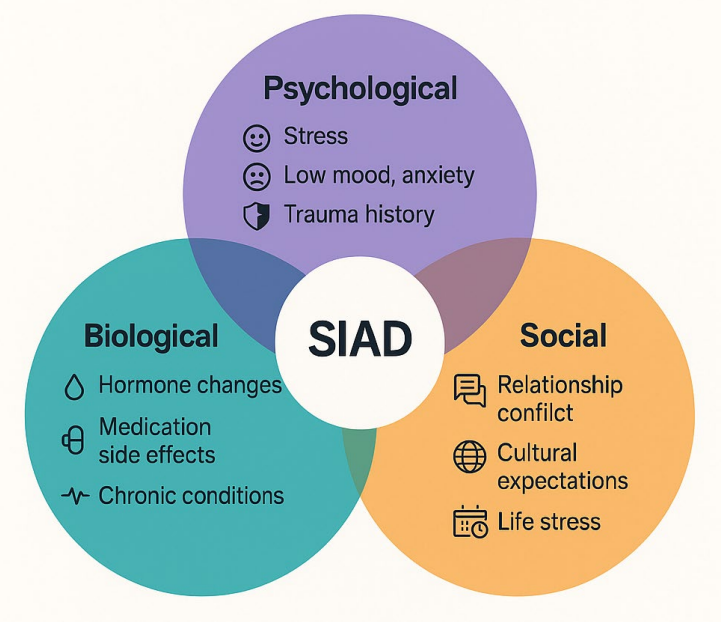
4. **Start & follow-up:**
   - **Flibanserin/Bremelanotide:** Reassess at 8 weeks
   - **Testosterone:** Reassess at 6 weeks with labs
5. **If no benefit:** Stop per timelines and consider referral

This way of looking at sexual desire helps normalize people's experiences. It shows that changes in desire are often linked to context and can shift over time. It also supports shared decision making, because patients and providers can look together at what might be affecting desire and choose medical and non-medical approaches that fit best.

Biopsychosocial model

SIAD isn't just about biology. It's usually shaped by a mix of body, mind, and social life. On the biological side, things like hormone changes, side effects of medication, or ongoing health conditions can lower interest. Psychologically, stress, mood problems, trauma, or concerns about body image may play a role. Socially, relationship problems, cultural expectations, and everyday life stressors can all have an impact too.[5]

Because desire is influenced by all these areas, treatment often works best when it looks beyond medication alone. Medicine can help some people, but it should usually be part of a bigger plan that might also include counseling, improving relationship communication, or strategies to manage stress.[5]



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