



Press release

## **Top-line data from a Phase 3 clinical trial demonstrates that Zubsolv® (buprenorphine/naloxone CIII sublingual tablet) is as effective as Suboxone® film in the treatment of opioid dependence**

**Uppsala, Sweden – June 25, 2014** – Orexo announces top-line data from a Phase 3 clinical trial demonstrating that Zubsolv® (buprenorphine/naloxone CIII sublingual tablet) is as effective as Suboxone® film in the treatment of opioid dependence. The results from a randomized, non-inferiority, multicenter, comparative trial (N=758) establish that, despite a 29 % lower dose, Zubsolv provides equivalent efficacy compared to Suboxone film in patients who are opioid dependent. The Induction, STabilization, Adherence and Retention Trial (ISTART) (Study OX219-006), sponsored by Orexo, was the largest trial ever conducted with buprenorphine (N=758).

The primary endpoint of the ISTART study was retention in treatment at Day 15 with Zubsolv and Suboxone film. The study showed that there was no difference in retention in treatment at Day 15 [Zubsolv arm: 83% (273/329); Suboxone film arm: 82.5% (269/326)]. As previously announced an additional co-primary endpoint assessed Zubsolv as a treatment for induction of buprenorphine maintenance therapy compared to generic buprenorphine monotherapy. There was no difference in retention at Day 3 [Zubsolv arm: 93.3% (309/329); generic buprenorphine arm: 92.6% (302/326)] in the per protocol set.

Similar improvements for both groups were observed in Clinical Opiate Withdrawal Scale (COWS), Subjective Opiate Withdrawal Scale (SOWS), and opioid cravings VAS total scores. Physicians and patients, using the Clinical Global Impression (CGI-I) and Patient Global Impression (PGI-I) Improvement scales, reported that both treatments resulted in an average score of “much improved” from baseline at study end.

“The ISTART study confirms Zubsolv is appropriate and effective for maintenance treatment of patients with opioid dependence,” said Erik Gunderson, MD, FASAM, the principle investigator of the study. “When you consider that Zubsolv with a 29% lower dose has similar efficacy to Suboxone film, a preferred taste, child-resistant packaging, and fast dissolve time, physicians have an important alternative treatment option in the fight against this public health epidemic.”

Nikolaj Sorensen, Chief Executive Officer of Orexo, noted, “This is another example of Orexo’s commitment in advancing the treatment of opioid dependence for the patients who suffer from this disease and in supporting the physicians who treat them. To our knowledge, this is the largest clinical trial ever conducted to assess buprenorphine for the treatment of opioid dependence. These data provide evidence that Orexo’s advanced formulation technology is medically meaningful and we are proud to offer a product that is efficacious, convenient and safe at a lower dose, decreasing the amount of buprenorphine available for diversion. Finally, this comprehensive



study indicates that a good clinical outcome can be obtained using Zubsolv for induction treatment followed by maintenance treatment. With this data all physicians should feel comfortable offering and switching their patients suffering from opioid dependence to Zubsolv from their existing treatment with buprenorphine and naloxone”.

**For further information, please contact:**

Nikolaj Sorensen, President and CEO

Tel: +46 (0)703-50 78 88, E-mail: [ir@orexo.com](mailto:ir@orexo.com)

**About the ISTART Trial**

The IStart Trial was a randomized, non-inferiority, multicenter study to assess early treatment efficacy of Zubsolv versus SUBOXONE film and to explore switching between treatments. The primary endpoints were retention in treatment at Day 15 and Day 3. Secondary efficacy assessments included scores on the COWS and SOWS, and opioid cravings VAS, CGI and PGI improvement from baseline, and switching between Zubsolv and Suboxone film. 758 opioid dependent adult subjects were randomized. On days 1 and 2, patients received a blinded, fixed dose of Zubsolv (5.7/1.4 mg and 5.7/1.4 or 11.4/2.8 mg, respectively) or generic buprenorphine monotherapy (8 mg and 8 or 16 mg, respectively). On Day 3, the patients on generic buprenorphine were switched to Suboxone film and patients in the Zubsolv arm continued to receive Zubsolv. Stabilization doses were titrated to a maximum daily dose of 17.1/4.2 mg and 24/6 mg for Zubsolv and Suboxone film, respectively, based upon clinical symptoms.

**About Orexo AB**

Orexo is a specialty pharma company with commercial operations in the United States and R&D in Sweden developing improved treatments using proprietary drug delivery technology and commercial operations in the United States. The company is commercializing its proprietary product, Zubsolv®, for maintenance treatment of opioid dependence, in the United States. Zubsolv is a novel formulation of buprenorphine and naloxone using Orexo’s extensive knowledge in sublingual technologies. Orexo has a portfolio of two approved and revenue generating products currently marketed under license in the EU and US. Orexo AB, with its headquarters in Sweden, is listed on NASDAQ OMX Stockholm Exchange and its American Depositary Receipts (ADRs) trade on the OTCQX marketplace in the U.S. under the symbol, “ORXOY”. The largest shareholders are Novo A/S and HealthCap.

For information about Orexo, please visit [www.orexo.com](http://www.orexo.com)

**About Zubsolv®**

Zubsolv (buprenorphine and naloxone) sublingual tablet (CIII) is indicated for the maintenance treatment of opioid dependence and should be used as part of a comprehensive treatment plan, which includes counseling and psychosocial support. Treatment should be initiated under the direction of physicians who



are certified under the Drug Addiction Treatment Act of 2000, and who have been assigned a unique identification number ("X" number).

Zubsolv sublingual tablets can be abused in a manner similar to other opioids, legal or illicit. Clinical monitoring appropriate to the patient's level of stability is essential. Liver function tests should be monitored before and during treatment. Children who take Zubsolv sublingual tablets can have severe, possibly fatal, respiratory depression. Emergency medical care is critical. Keep Zubsolv sublingual tablets out of the sight and reach of children.

Adverse events commonly observed with the sublingual administration of buprenorphine/naloxone sublingual tablets during clinical trials and post-marketing experience are headache, nausea, vomiting, hyperhidrosis, constipation, signs and symptoms of withdrawal, insomnia, pain and peripheral edema.

Further information on Zubsolv can be found at [www.zubsolv.com](http://www.zubsolv.com).

Suboxone is a registered trademark of Reckitt Benckiser Healthcare (UK) Ltd.

*Orexo AB (publ) discloses the information provided herein pursuant to the Financial Instruments Trading Act and/or the Securities Markets Act. The information was submitted for publication at 8:30 am CET on June 25, 2014.*