

SUN-094

Background: Leuporelin (Enantone®) is a gonadotropin-releasing hormone (GnRH) analogue used worldwide to treat central precocious puberty (CPP). This clinical trial aimed to evaluate the long-term safety and efficacy of leuporelin in treating Chinese CPP children.

Methods: This is the first, prospective, open-label, and multicenter study conducted from 2015 to 2018, in China. As a large interventional study, it included a four-week screening period, a 96-week treatment period, and a four-week safety follow-up period. Eligible subjects were treated with leuporelin subcutaneously once every four weeks for 96 weeks. At the beginning of the study, subjects whose body weight ≥ 20 kg received a dose of 3.75 mg and those < 20 kg received a dose of 1.88 mg and then the dose was allowed to be adjusted during the study based on subject's condition and investigator's judgment. The primary endpoint was the incidence of adverse events during treatment, and the secondary endpoint was the percentage of subjects who had regression or no progression in Tanner stage at Week 96 compared with baseline.

Results: A total of 307 CPP patients from 11 Chinese medical centers received leuporelin, of which 305 (99.3%) were girls and 2 were boys (0.7%), with a mean (\pm SD) age of 7.95 ± 0.982 years and a mean height of 133.68 ± 7.108 cm. Two hundred eighty-three (92.2%) patients completed the 96-week treatment period. Two hundred fifty-two patients (82.1%) reported treatment-emergent adverse events (TEAEs)—most of which (79.5%) were mild to moderate. Only 33 (10.7%) patients experienced TEAEs that were considered related to leuporelin. The most frequent ($> 2\%$) drug-related TEAEs were injection site induration (4.6%, 14/307) and vaginal bleeding (2.3%, 7/305). After the 96-week treatment period, 83.5% female subjects had regression or no progression in Tanner stage compared with baseline (95% CI: 78.68%, 87.62%) and the 2 male subjects had progression of 1 point in Tanner stage genital score occurred at Week 12 and then remained stable throughout the study. By the end of the treatment period, the majority of subjects had decreased GnRH stimulated peak LH and FSH, as well as reduced sex hormone levels and bone age/chronological age ratio compared with baseline. The subjects also had increased predicted adult height and BMI after treatment.

Conclusions: This Chinese study demonstrated that CPP was effectively treated in most patients who received leuporelin (Enantone®) for nearly two years. Any drug-related adverse events were reported with low incidence ($< 5\%$) and were consistent with the known safety profile of leuporelin. Leuporelin was shown to be well tolerated and effective in the management of CPP in Chinese patients.

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MON-312

Background: Dopaminergic agonist cabergoline (CAB) has been used in pharmacological treatment of Cushing's disease (CD). The effect is attributed to the frequent expression of subtype 2 dopamine receptor in corticotrophic tumors. However, *in vivo* studies demonstrated normalization of urinary cortisol (UC) in about 30-40% of cases over the long term, mainly after surgical failure. **Objective:** To evaluate the effect of CAB as monotherapy in early preoperative period and on recurrence of Cushing's disease. **Methods:** A single-center retrospective study was conducted in a tertiary referral center. Twenty-one patients with confirmed CD were included. Median age was 32 years (13-70), 86% female, 10 with microadenomas, 11 with macroadenomas. They were diagnosed from 1986 to 2016 and used CAB as monotherapy either in the preoperative period ($n=7$, CABi) or in recurrence, before any other treatment ($n=14$, CABr). It was considered 'complete response' a 24h-UC normalization and 'partial response' a 24h-UC reduction $> 50\%$. UC was obtained on the last follow-up evaluation. Normalization of nocturnal salivary cortisol (NSC) on CAB was evaluated in most cases, as well as the larger tumor diameter by pituitary MRI, before and after CAB treatment. **Results:** Complete response was achieved in 29% (6/21) of subjects after 14.9 ± 16.4 months of treatment with a mean dose of 2.2 ± 1.0 mg/week. Partial response occurred in 9.5% (2/21). NSC normalized in 35% (6/17) and no variation in tumor diameter before and after CAB use was observed ($n=13$): 6.8 ± 6.8 vs. 7.2 ± 7.1 mm, respectively. There was no normalization of UC in CABi at the end of the treatment whereas in CABr, 43% (6/14) of patients reached complete response. CABi group was treated for 4.7 ± 1.9 months and CABr was treated for 20.1 ± 18.1 months. Both groups were on similar doses of CAB (CABi 2.1 ± 0.9 and CABr 2.3 ± 1.1 mg/w). Interestingly, the difference between the groups' complete response was evident early on 3 months of treatment: no cases in CABi vs. 60% (6/10) in CABr ($p=0.035$) despite a lower dose in CABr (1.0 vs. 1.5; $p=0.008$). Normalization of NSC occurred in 20% in CABi and 42% in CABr. **Conclusion.** Normalization of UC and NSC occurred in about 30% of total patients, mainly those who used CAB on recurrence of CD. Due to the small number of subjects in CABi group, the absence of hormone control in this group requires further investigation in order to verify the effectiveness of CAB as primary therapy or as preoperative treatment option.

Neuroendocrinology and Pituitary**PITUITARY TUMORS II****The Effects of Cabergoline in Pre-Surgical and Recurrence Periods of Cushing's Disease Patients**

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Thyroid**THYROID CANCER CASE REPORTS I****Metastatic Thyroid Cancer**

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SUN-489

Background In many cases, thyroid cancer leads to metastasis; however, isolated metastasis to the liver from thyroid