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PROSPECTIVE, OPEN-LABEL, LONG-TERM FOLLOW-UP OF NEONATES AND YOUNG CHILDREN WITH ADRENAL INSUFFICIENCY TREATED WITH HYDROCORTISONE GRANULES

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Introduction: Children with congenital adrenal hyperplasia (CAH) and adrenal insufficiency (AI) rely on lifelong hormone replacement with hydrocortisone (HC). Alkindi® is the first HC licensed for children from birth to 18 years with AI, available in small doses of 0.5, 1, 2 and 5mg required for the needs of neonates, infants and children.
Objectives: Long-term safety of Alkindi® and long-term disease control in children aged 0-6 years were investigated.

Conclusions: During >2-year follow up of children aged 0-7 years, no AEs related to Alkindi® treatment and no adrenal crisis occurred. All children grew along their expected percentiles. Mean daily HC-dose controlled by routine saliva sampling was at the lower recommended dose-range.

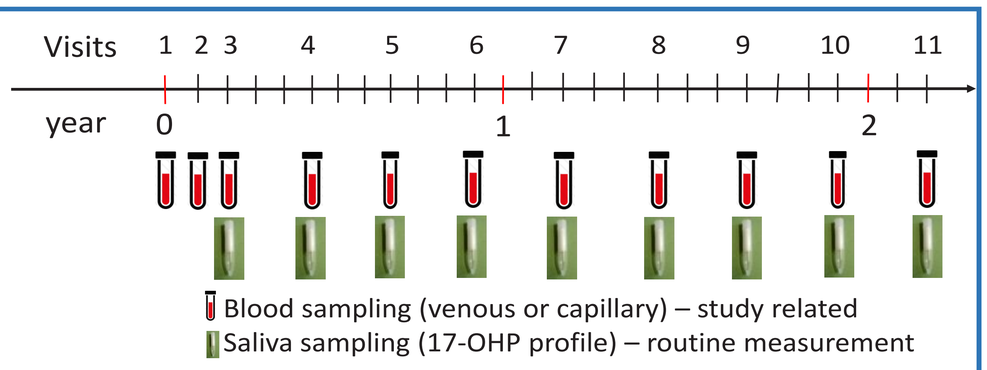
Methods:

24 patients aged 0-6 years from initial Phase 3 trial, all Caucasian

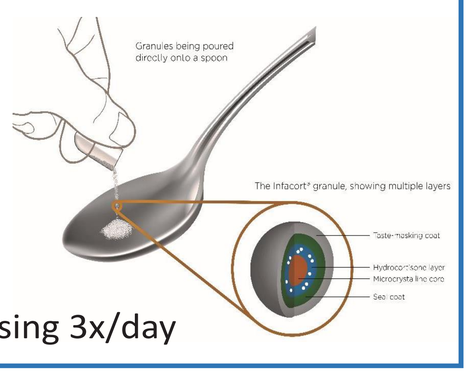
↓

18 patients enrolled

Initial trial group	Cohort 1	Cohort 2	Cohort 3
n	9-CAH	5-CAH, 1-Panhypopituitarism	3-CAH
Median age at entry	3.6 years	2 years	46 days
Male/female	5/4	4/2	1/2
Median (Range) HC-dose (mg/sqm) – Visit 1	11.89 7.15 – 15.54	9.94 8.63 – 12.24	12.01 11.05 – 29.49
Median (Range) HC-dose (mg/sqm) – last Visit	11.09 9.87 – 15.88	9.33 7.95 – 14.03	12.73 9.04 – 13.8



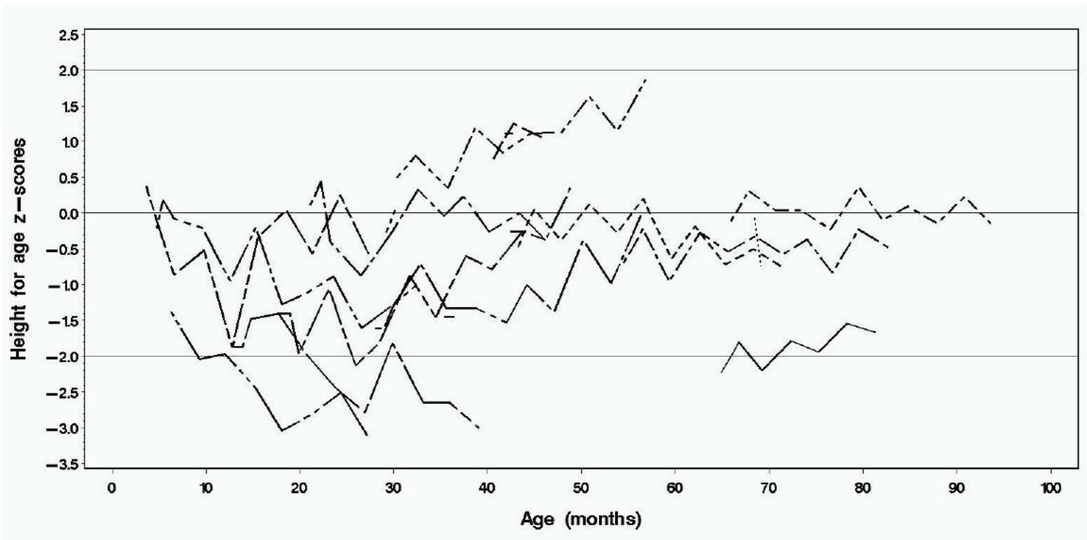
Dose adaptation algorithm with 17-OHP profile (taken just before HC dosing):
Target range: 5fold age specific reference ranges, 10fold in the morning.
17-OHP at 2 times > target range → HC-dose ↑
17-OHP at 2 times < target range → HC-dose ↓



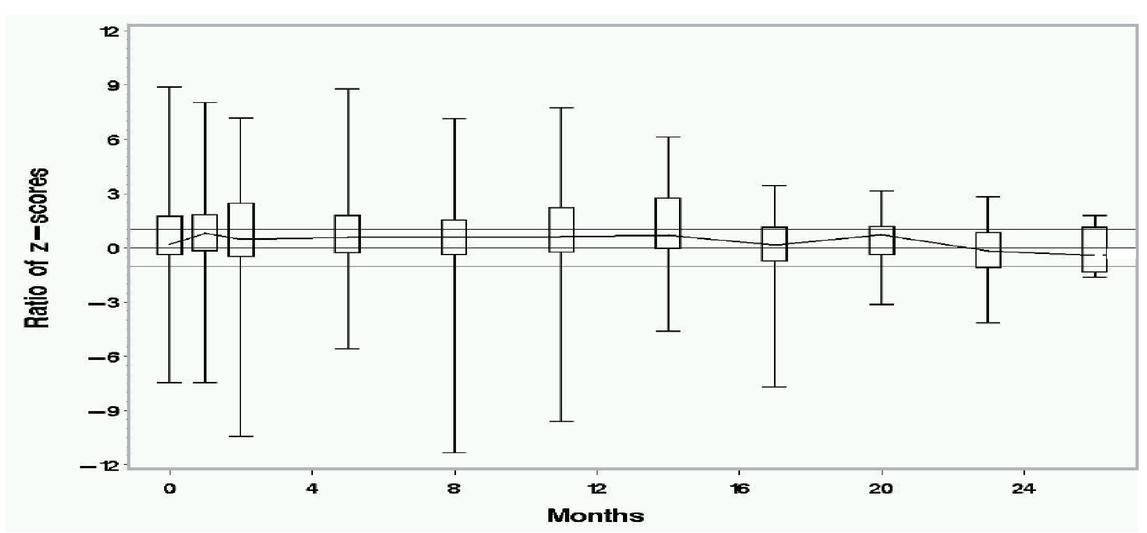
Hydrocortisone dosing 3x/day

Results:

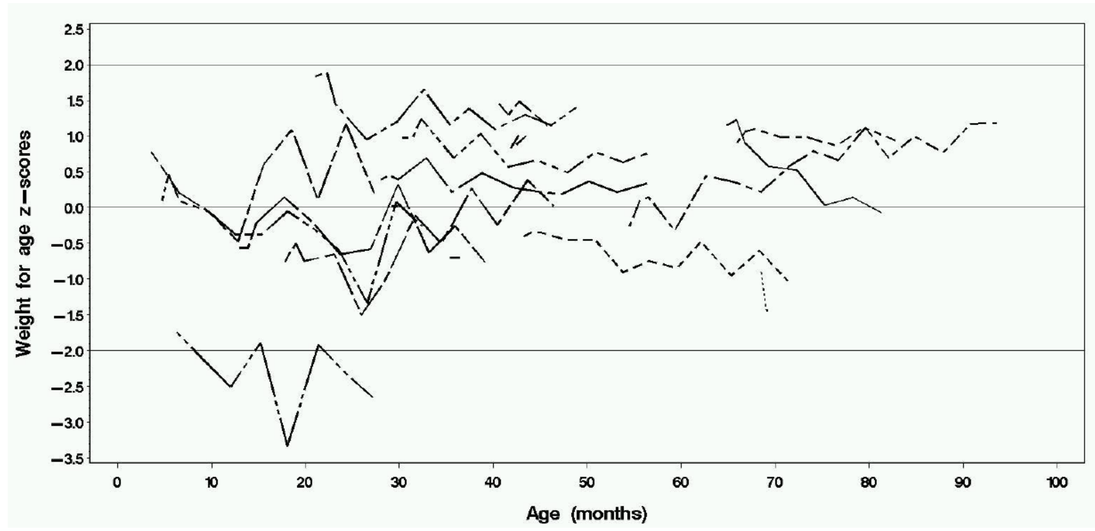
Height for age (z-score) over study time of every single patient



Ratio children´s height z-score and target height z-score over time



Weight for age (z-score) over study time of every single patient



Treatment-emergent adverse events (TEAEs) in 14 patients (n=193)

Viral/bacterial infections of respiratory tract (n=67)	Gastrointestinal disorders/ Infections (n=51)	Pyrexia (n=45)	Other (n=30)

Severe adverse events (SAEs) n= 9 in 3 patients (n=3)

Gastroenteritis (n=4)	Vomiting (n=2)	Urinary tract infection (n=2)	Erysipelas (n=1)

No cases of adrenal crisis, no AEs of choking, no death.
No severe TEAEs, TEAEs leading to withdrawal from the study, and no TEAEs with a suspected causal relationship to Alkindi®.

References: Neumann, Whitaker et al., Clinical Endocrinology 2018;88:21–29
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