Issue 4, April 2016

ADDUCE NEWSLETTER

ATTENTION DEFICIT HYPERACTIVITY DISORDER DRUGS USE CHRONIC EFFECTS

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A 24-month prospective open-label observational cohort pharmacovigilance study of methylphenidate (MPH) use

In this study, children between 6 and 17 years old from the UK, Italy, Germany and Hungary were followed up for 24 months. To investigate the effects of MPH, children were divided in three groups: children with ADHD on MPH, children with ADHD without MPH and children without ADHD. Growth and development, and cardiovascular, neurological and psychiatric parameters have been measured to discover more about the effects of the long term use of MPH.

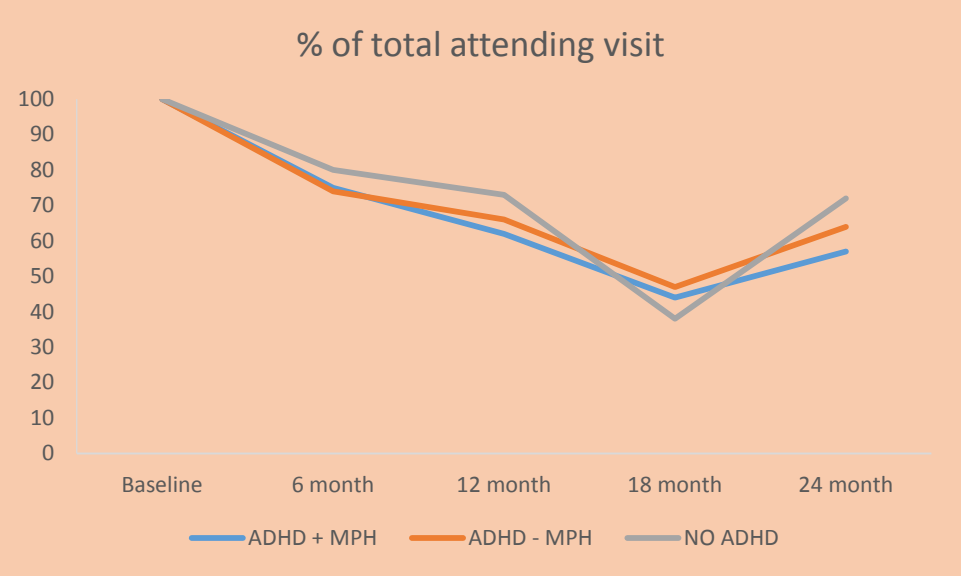
A large number of participants took part in this study. In total, 1323 children participated and 816 children were followed-up for the full 2 years.

	ADHD + MPH	ADHD - MPH	NO ADHD	Total
Baseline	711	356	256	1323
6 month	535	265	206	1006
12 month	411	235	186	832
18 month	314	167	98	579
24 month*	405	227	184	816

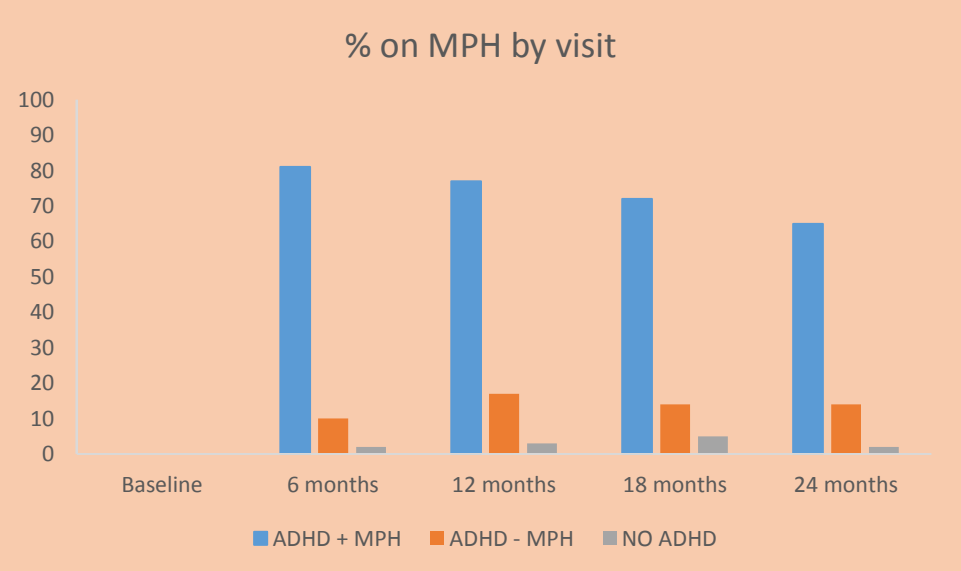
* Includes some 18 month final visits

We are very grateful to all the children and their families who participated in the study!

In the graph below, you can see the percentage of participants who attended each visit.



During the study, the use of MPH was carefully monitored in all the groups. This will be very helpful in analyzing the data and clarifying the effects of methylphenidate.
Below you can see the percentage of children who were on MPH at each visit.



Two years or longer use of MPH and effects on 24-hours blood pressure measures and left ventricular mass using echocardiogram in adolescents and young adults with ADHD

In this part of the ADDUCE project, adolescents and adults with ADHD between 12 and 25 years old from the Netherlands, the UK, Spain, and Hungary were monitored during one visit. To investigate whether taking medication for a long term was associated with increases in blood pressure and left ventricular hypertrophy, participants were divided in two groups: individuals with ADHD who were on MPH for over 2 years and individuals with ADHD without MPH. Participation in the study comprised a general assessment and a physical examination with a special focus on cardiovascular measurements.

Again, a large number of adolescents and young adults participated in the study.

In total, 240 adolescents and adults with ADHD were examined.

Sites, Nov 2015	ADHD + MPH	ADHD - MPH	Total
Nijmegen	51	24	75
Budapest	49	20	69
Groningen	44	9	53
Barcelona	16	10	23
Dundee	11	6	17
Total	**171**	**69**	**240**

Future plans

As the final purpose of the ADDUCE project is to have a comprehensive overview of the effects of MPH, a lot of parameters were investigated. The participants completed many questionnaires and had several physical assessments. This information has been entered in a central database and investigators are now in the process of checking this database in order to avoid incomplete or inaccurate records. Once the data cleaning will be finalized, the team of statisticians will start analyzing the data to study the long term effects of MPH on different domains. Based on these findings, the ADDUCE team will provide clinical guidance regarding the use of MPH in every day clinical practice.