# Focalin ${ }^{\circledR}$ XR (dexmethylphenidate HCI) Extended-Release Capsules CII 

Treatment for Adults With ADHD





## DSM-IV Core Symptoms of ADHD in Adults weiss et al. 2003, p. 717 AJ

## Inattention

Makes careless mistakes
Is inattentive to tasks
Has difficulty following verbal instructions
Has difficulty completing tasks Is disorganized
Avoids tasks that require much concentration
Misplaces things
Is easily distracted
Is forgetful

## Hyperactivity/Impulsivity

Fidgets with hands or feet Has trouble sitting still
Feels restless and jittery
Has trouble doing things quietly
Is always "on the go"
Talks excessively
Acts before thinking things through
Is Impatient
Interrupts others

## ADHD Presents Differently in Adults Than in Children

ADHD behaviors change with age
Adults tend to be less hyperactive than children [Weiss et al. 2004, p.28A]
The male to female ratio narrows [Weiss et al. 2004, p.29A]
Different diagnostic challenges
Relationship to comorbid disorders
Often present with symptoms of anxiety or depression [Weiss et al. 2003, p.716B]
Patients have lived with symptoms and may learn to compensate for some of them [Weiss et al. 2004, p.28B]

## Lifetime Course of ADHD Symptoms: Inattention Domain <br> [APA DSMV-IV 2000 p. 894; Weiss 2004 p. 27D, 28G,D]

## Childhood

Difficulty sustaining attention
Doesn't listen
No follow through
Can't organize
Loses important items

## Adult

Difficulty sustaining attention (meetings, reading, paperwork)

Paralyzing procrastination
Slow, inefficient

Poor time management
Disorganized

## Lifetime Course of ADHD Symptoms: Hyperactivity/Impulsivity Domain [APA DSMV-IV 2000 p. 86A; Weiss 2004 p-28 A,G,F,H]

## Childhood

Squirming, fidgeting
Can't stay seated
Can't wait turn
Runs/climbs excessively
Can't play/work quietly
On the go/driven by motor
Talks excessively
Blurts out answers
Intrudes/interrupts others

## Adult

Inefficiencies at work
Can't sit through meetings
Can't wait in line
Drives too fast
Self-selects very active job
Can't tolerate frustration
Talks excessively
Makes inappropriate comments
Interrupts others

## Potential Impact of Untreated ADHD Across the Lifespan [AAP 2000 pg. $1158 \mathrm{c}_{\text {F }}$ Barkley et al. 2002, p. 10 B, 13 A-Df Baren 2002, pg. 3AJ

Low selfesteem

Academic limitations

Smoking and substance abuse

Legal problems

Injuries

Impaired Family and Peer Relationships

Motor vehicle accidents

## Adulthood

Occupational/ vocational difficulties

## Associated Comorbidities Add to Personal and Economic Costs of ADHD in Adults [ziederman 2004, p. 5 E]

$\square$ Females without ADHD $\square$ Females with ADHD $\square$ Males without ADHD $\square$ Males with ADHD


## Desired Treatment Outcomes in Adult ADHD

Work function [Weiss et al. 2004, p.32B, C]

Improved time management, organizational skill and productivity
Meeting deadlines
Maintaining attention during meetings
Home/personal function [Weiss et al. 2004, p.32B, C]
Better family interactions
Parenting, helping children with homework, spousal interactions Improved time management and organizational skills

Able to pay bills, not losing sight of necessary activities/deadlines, planning activities
Able to control impulses
Avoiding speeding/recklessness during driving Decreased substance use

## Nonpharmacological Interventions

Psychoeducation for patient and family members Support groups (www.chadd.ora) [www.chadd.org, p1A]
Coaching (www.coaching.com) [www.coaching.com, p1A]
Psychotherapy
Cognitive behavioral therapy may be useful ${ }^{1}$ [Safren et al. 2005, 837A]

## FDA-Approved Medications Indicated for ADHD in Adults* <br> [Weiss et al. 2004, p. 34 A, B,C]

## Stimulants

d-methylphenidate
Mixed amphetamine salts
Nonstimulant
Atomoxetine $\quad$ Strattera ${ }^{\circledR} \quad$ November, 2002

## Brand Names

Focalin ${ }^{\circledR}$ XR May, 2005
Adderall $X^{(8)}$
August, 2004
Approval Date (US)

Focalin XR is the only methylphenidate formulation approved in adults

## Focalin ${ }^{\circledR}$ XR: A Single-Isomer Formulation of Methylphenidate

Therapeutic effect of racemic $d, I-M P H$ resides primarily in the d-enantiomer ${ }^{1}$ [Srinivas et al 2001, p.1207A]
Focalin XR contains only the pharmacologically active d-enantiomer of d,I-MPH ${ }^{2}$ [Focalin XR PI 2006, p.1A]

Only need half the dose of racemic MPH [Focalin XR PI 2006 p.22A, 2C; Markowitz 2005 Abstract AI

Advantages of single-isomer therapeutics may include ${ }^{3}$ : [Hutt 2003,p.7A,8A]

More selective pharmacologic profile
Potential for improved therapeutic index
Less complex pharmacokinetic profile
Potential for decreased drug interactions

## Focalin ${ }^{\circledR}$ XR: A Once-Daily Formulation of $d$-MPH

Rapid onset, similar to immediate-release Focalin [Focalin XR PI 2006, p.1A, 2B] Uses SODAS ${ }^{\circledR}$ extended-release technology to mimic BID dosing [Focalin XR PI 2006, p.2AJ
$50 \%$ of dose released immediately upon administration
$50 \%$ of dose released $\approx 4 \mathrm{~h}$ later for extended duration of action
Once-daily dose in morning eliminates need for midday dose [Focalin XR PI 2006, p.21A]

Flexible, individualized dosing [Focalin XR PI 2006, p.1B]
Smooth response curve over postdose interval [Focalin XR PI 2006, p. 2C, 4A]

| Dose | d-MPH |  |  |
| :---: | :---: | :---: | :---: |
|  | 5 mg | 10 mg | 20 mg |
|  |  | 50\% |  |
| Immediate release | 2.5 mg | 5 mg | 10 mg |
|  |  | 50\% |  |
| Second release | 2.5 mg | 5 mg | 10 mg |

# Focalin ${ }^{\circledR}$ XR (dexmethylphenidate HCI) Extended-Release Capsules CII 

Efficacy and Safety in the Adult Population

## Focalin ${ }^{\circledR}$ XR in Adults With ADHD: 5-Week Study

Objective: to evaluate the efficacy and safety of Focalin XR administered once daily as compared with placebo in adults meeting DSM-IV criteria for ADHD [Spencer 2006 p. 5B]
5-week, randomized, multicenter, double-blind, fixed-dose, parallelgroup design [Spencer 2006 p. 5A, 6A]

Focalin XR 20 mg/day ( $\mathrm{n}=58$ )
Focalin XR 30 mg/day ( $n=55$ )
Focalin XR 40 mg/day ( $n=55$ )
Placebo ( $\mathrm{n}=53$ )
Symptoms were assessed for the previous week [CSR 2302, p. 25A]

## Focalin ${ }^{\circledR}$ XR in Adults With ADHD: Outcome Variables

Primary:
Change from baseline in DSM-IV ADHD RS Total [CSR 2302, 11AJISpencer 2006 p. 6C]
Secondary: [Spencer 2006 p. 6-7D]
Change from baseline in DSM-IV ADHD inattention and
hyperactivity/impulsivity subscales
Change from baseline in CAARS Self-Report and Observer Scores
Proportion of patients with improvement of $\geq 30 \%$ in ADHD
Rating Scale Total
Proportion of patients with improvement on CGI-I

## Focalin ${ }^{\circledR}$ XR in Adults With ADHD: Demographic and Baseline Characteristics [spencer 2006 p. 98, 25A]

| Variable | Placebo <br> $(\mathrm{n}=53)$ | Focalin XR <br> $\mathbf{2 0 ~ m g ~ ( ~} \mathrm{n}=58)$ | Focalin XR <br> $\mathbf{3 0} \mathbf{m g}(\mathrm{n}=55)$ | Focalin XR <br> $\mathbf{4 0} \mathbf{~ m g ~}(\mathrm{n}=55)$ |
| :--- | :---: | :---: | :---: | :---: |
| Gender |  |  |  |  |
| $\quad$ Male (\%) | 50.9 | 55.2 | 61.8 | 61.8 |
| Mean age (y) | 38.1 | 39.1 | 39.1 | 38.2 |
| Race (\%) |  |  |  |  |
| Caucasian | 75.5 | 100 | 87.3 | 78.2 |
| Black | 5.7 | 0 | 5.5 | 7.3 |
| Asian | 5.7 | 0 | 0 | 7.3 |
| $\quad$ Other | 13.2 | 0 | 7.3 | 7.3 |
| ADHD Subtype (\%) |  |  |  |  |
| $\quad$ Inattentive | 22.6 | 29.3 | 25.5 | 29.1 |
| $\quad$ Hyperactive/Impulsive | 1.9 | 3.4 | 5.5 | 1.8 |
| $\quad$ Combined | 75.5 | 67.2 | 69.1 | 69.1 |
| Duration of ADHD (y) | 31.1 | 32.9 | 33.5 | 31.9 |
| Past ADHD Medication (\% yes) | 49.1 | 34.5 | 21.8 | 40.0 |
| Baseline ADHD-RS total | 37.5 | 36.9 | 36.9 | 36.7 |

## Focalin ${ }^{\circledR}$ XR Significantly Reduced ADHD Total Symptom Scores [Spencer 2006 p. 10B]

Mean Change From Baseline in ADHD RS Total Score


Focalin XR 20 mg is currently the maximum dose approved in adults.
${ }^{*} P<0.01{ }^{\star} P<0.05,{ }^{\star} P=0.001$ vs placebo.
Study 2302.
Spencer T et al. Biol Psychiatry. 2006. In press.

## Focalin ${ }^{\circledR}$ XR Significantly Reduced Inattentive Symptoms [GSR 2302, p47AJ

Mean Change From Baseline in ADHD RS Inattention Subscale


Focalin XR 20 mg is currently the maximum dose approved in adults.

## Focalin ${ }^{\circledR}$ XR Significantly Reduced Hyperactivity/Impulsivity <br> [GSR 2302, p473]

Mean Change From Baseline in ADHD RS


Focalin XR 20 mg is currently the maximum dose approved in adults.
${ }^{*} P<0.01,{ }^{\dagger} P<0.05,{ }^{\ddagger} P<0.001$ vs placebo.
Study 2302.
Data on file, Novartis Pharmaceuticals Corporation.

## Patients Noted Significant Improvement in ADHD Symptoms

[Spencer 2006 p. 12A]
Mean Change From Baseline in CAARS Self-Report Scale


Focalin ${ }^{\circledR}$ XR 20 mg is currently the maximum dose approved in adults. ${ }^{*} P=0.003,{ }^{\dagger} P=0.045, \ddagger P=0.001$ vs placebo.

Spencer T et al. Biol Psychiatry. 2006. In press.


## Focalin ${ }^{\circledR}$ XR in Adults With ADHD: Other Secondary Outcomes

Significantly improved outcomes were achieved with Focalin XR versus placebo

Greater improvement in CAARS observer reports [Spencer 2006 p. 12A]
More patients experienced a $30 \%$ or greater improvement in ADHD-RS [Spencer 2006 p. 11A]
Significantly greater number of "responders" on the CGI-I [Spencer 2006 p. 11B, 11C]
Focalin XR patients perceived a rapid onset of action and all day coverage with one dose [CSR 2302, p.52B, 53AJ


## 6-Month Open-Label Extension of Treatment in Adults With ADHD

Subjects who completed the 5-week double-blind study were eligible to continue into a 6-month, open-label, flexible dose extension [Ad/er et al. 2005, p.1D] Initial dose of $10 \mathrm{mg} /$ day with individualized titration to a maintenance dose of between 20 mg and $40 \mathrm{mg} /$ day [Adler et al. 2005, p.1D]
Primary outcome: change in ADHD-RS from final double-blind visit (week 5) to final open-label visit [Adler et al. 2005, p.1E]
Secondary outcome: proportion of patients who improved on CGI-I from baseline to final open-label visit [Adler et al. 2005, p.1F]


## Focalin ${ }^{\ominus}$ XR in Adults With ADHD: Patient Flow in Double-Blind and Open-Label Studies <br> [Adler et al. 2005, p.1G; GSR 2302E1, p-25A, 26A,B]



## Focalin ${ }^{\circledR}$ XR Demonstrated Long-Term Symptom Control As Shown by ADHD Total Symptom Scores [Ader 2005 L]

Change in ADHD-RS Total Score at the End of Each Treatment
$\square$ Baseline


Dose range of Focalin XR in open-label study was between 10 and $40 \mathrm{mg} / \mathrm{day}$.
Mean exposure to study drug was 4.5 months.
*P<0.001 vs baseline.
Studies 2302 and 2302E1.
Adler LA et al. Poster. APA; 2005; Atlanta, Ga.

## Patients Continued to Experience Symptom Improvement with Focalin ${ }^{\oplus}$ XR

 [CSR 2302F1, post-text table 9.2-4, p.36B; Acler 2005 K]Focalin XR (Prior Placebo)

$$
(\mathrm{n}=20)
$$

No Improvement


Improvement in DB phase 45.0\%

Focalin XR (Prior Focalin XR)

$$
(n=82)
$$



Improvement in OL phase 95.0\%

Improvement in OL phase
95.1\%

Improvement in DB phase
*Improvement = score of 1 : "very much improved" or 2: "much improved." DB = double-blind; OL = open-label.
Studies 2302 and 2302E1.
Data on file, Novartis Pharmaceuticals Corporation.
Adler LA et al. Poster. APA; 2005; Atlanta, Ga. 59.8\%

## Focalin ${ }^{\circledR}$ XR in Adults With ADHD: Summary of Efficacy Results

Focalin XR is effective in treating adult ADHD [Adler et al. 2005, I] [Spencer et al 2004E]
Improvements are recognized by patients and blinded observers (family, clinicians) [CSR 2302, p.49A, 50A, 51A, 52A]
Improvements are observed in multiple settings (home, work, clinic, laboratory) [CSR 2302, p.26AB]
Improvements are sustained over 6 months [Adler et al. 2005, p.1B, 1C]
Patients perceived a rapid onset of action and all day coverage with one dose [CSR 2302, p.52B][CSR 2302, p.53A]

## Most Frequent Adverse Events Were As Expected for Stimulants [GSR 2302, p.55A,B, 56G]

Number (\%) of Patients Experiencing AEs at Frequencies $\mathbf{\geq 1 0 \%}$ in the 5 -week double-blind study

|  | Placebo $\mathrm{n}=53$ | $\begin{gathered} \text { Focalin }{ }^{\ominus} \mathrm{XR} \\ 20 \mathrm{mg} \\ \mathrm{n}=57 \end{gathered}$ | $\begin{gathered} \text { Focalin XR } \\ \begin{array}{c} 30 \mathrm{mg} \\ \mathrm{n}=54 \end{array} \end{gathered}$ | $\begin{gathered} \text { Focalin XR } \\ \begin{array}{c} 40 \mathrm{mg} \\ \mathrm{n}=54 \end{array} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| N(\%) patients with AEs |  |  |  |  |
| Headache | 10 (18.9) | 15 (26.3) | 16 (29.6) | 21 (38.9)* |
| Decreased appetite | 6 (11.3) | 11 (19.3) | 9 (16.7) | 10 (18.5) |
| Insomnia | 6 (11.3) | 10 (17.5) | 7 (13.0) | 10 (18.5) |
| Dry Mouth | 2 (3.8) | 4 (7.0) | 11 (20.4)* | 11 (20.4)* |
| Nausea | 2 (3.8) | 6 (10.5) | 1 (1.9) | 3 (5.6) |
| Feeling jittery | 1 (1.9) | 5 (8.8) | 10 (18.5)* | 5 (9.3) |
| Anxiety | 1 (1.9) | 3 (5.3) | 6 (11.1) | 6 (11.1) |

Focalin XR 20 mg is currently the maximum dose approved in adults.
${ }^{*} P<0.05$ vs placebo using a chi-square test.
Study 2302.
Data on file, Novartis Pharmaceuticals Corporation.

## Most Frequent Adverse Events ( $\geq 10 \%$ Overall) Over 6 Months <br> [Adler et al. 2005 A, J]

Summary of Adverse Events in 6-Month Open-Label Extension

|  | Mean Daily Dose of Focalin ${ }^{\circledR}$ XR |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\underset{n=41}{20 \mathrm{mg} / \mathrm{day}}$ | $\underset{n=64}{20-30 \mathrm{mg} / \mathrm{day}}$ | $\begin{gathered} >30 \mathrm{mg} / \mathrm{day} \\ \mathrm{n}=65 \end{gathered}$ | $\begin{gathered} \text { All } \\ \mathrm{N}=170 \end{gathered}$ |
| N(\%) patients with AEs |  |  |  |  |
| Headache | 8 (19.5) | 24 (37.5) | 15 (23.1) | 47 (27.6) |
| Insomnia | 10 (24.4) | 21 (32.8) | 3 (4.6) | 34 (20.0) |
| Decreased appetite | 4 (9.8) | 16 (25.0) | 10 (15.4) | 30 (17.6) |
| Feeling Jittery | 12 (29.3) | 6 (9.4) | 5 (7.7) | 23 (13.5) |
| URI | 1 (2.4) | 10 (15.6) | 11 (16.9) | 22 (12.9) |
| Anxiety | 5 (12.2) | 9 (14.1) | 7 (10.8) | 21 (12.4) |
| Dry Mouth | 2 (4.9) | 8 (12.5) | 11 (16.9) | 21 (12.4) |

Focalin XR 20 mg is currently the maximum dose approved in adults. Study $2302 E 1$.
Adler LA et al. Presented at the 158th Meeting of the American Psychiatric Association, May 21-25, 2005.


## No Clinically Significant Changes in Vital Signs or Body Weight Vs Placebo <br> [GSR 2302 Fg . 62A, G; Spencer 2006 p. 134, 14A, B]

Mean Change From Baseline in Vital Signs and Weight

|  | 5-Week Double-blind Study |  | 6-Month Extension |
| :---: | :---: | :---: | :---: |
| Variable | Focalin ${ }^{\circledR}$ XR (all doses) $\mathrm{n}=168$ | Placebo $\mathrm{n}=53$ | Focalin XR 10-40 mg/d $\mathrm{N}=170$ |
| Systolic BP (mmHg) | $-0.5 \pm 11.5$ | $-1.7 \pm 11.3$ | $2.3 \pm 12.6$ |
| Diastolic BP (mmHg) | $1.0 \pm 8.4$ | $0.3 \pm 7.8$ | $1.6 \pm 9.8$ |
| Pulse | $4.4 \pm 11.0$ * | $-1.4 \pm 9.3$ | $3.7 \pm 11.3$ |
| Weight (kg) | $-1.4 \pm 2.1 *$ | $-0.1 \pm 3.9$ | $-1.8 \pm 6.8$ |

No patients receiving Focalin $X$ R experienced clinically notable changes in vital signs, although clinically notable weight loss occurred in $19.4 \%$ of treated patients over 6 months

Focalin XR 20 mg is currently the maximum dose approved in adults.
*P<0.05 vs placebo using a t-test.
Studies 2302 and 2302E1.
Spencer T et al. Presented at the 157 th Meeting of the American Psychiatric Association, May 1-6, 2004.
Data on file, Novartis Pharmaceuticals Corporation.


## Focalin ${ }^{\circledR}$ XR in Adults With ADHD: Summary of Safety

The most frequent AEs associated with short-term and longer-term treatment were transient, mild to moderate, and consistent with those seen in stimulants [CSR 2302E1 p. 46A]
Minimal changes in vital signs over 6 months [CSR 2302E1 p. 53A]
Some weight loss over 6 months [CSR 2302E1 p. 53A]

## Focalin ${ }^{\circledR}$ XR\& Indications

Focalin XR (dexmethylphenidate hydrochloride) extended-release capsules is indicated for the treatment of Attention deficit Hyperactivity Disorder (ADHD) in patients aged 6 years or older [Focalin XR PI pg 8A]
Focalin XR is indicated as an integral part of a total treatment program for ADHD that may include other measures (psychological, educational, social) for patients with this syndrome [Focalin XR PI pg 8B]

## Focalin ${ }^{\circledR}$ XR: Contraindications

## Agitation

Focalin XR (dexmethylphenidate hydrochloride) extendedrelease capsules is contraindicated in patients with market anxiety, tension, and agitation, since the drug may aggravate these symptoms. [Focalin XR PI 2006 p.9A]
Hypersensitivity to methylphenidate
Focalin XR is contraindicated in any patient known to be hypersensitive to methylphenidate, or any components of this product. [Focalin XR PI 2006 p.9B]

## Focalin ${ }^{\circledR}$ XR: Contraindications (cont)

## Glaucoma

Focalin XR is contraindicated in patients with Glaucoma [Focalin XR
PI 2006 p.9C]
Tics
Focalin XR is contraindicated in patients with motor tics or with a family history or diagnosis of Tourette's syndrome [Focalin XR PI 2006 p.9C]
Monoamine Oxidase Inhibitors
Focalin XR is contraindicated during treatment with monoamine oxidase inhibitors, and also within a minimum of 14 days following discontinuation of treatment with a monoamine oxidase inhibitor (hypertensive crisis may result) [Focalin XR PI 2006 p.9D]

## Warnings - 1 of 2

> Stimulants should generally not be used in children, adolescents, or adults with known serious structural cardiac abnormalities, cardiomyopathy, serious heart rhythm abnormalities, or other serious cardiac problems. Use with caution in treating patients with underlying medical conditions that might be compromised by increases in blood pressure or heart rate such as those with pre-existing hypertension, heart failure, recent myocardial infarction, or ventricular arrhythmia. Before initiating treatment, patients should have careful history and physical exam to assess for presence of cardiac disease. [Focalin XR PI 2006 p.10AB)

## Warnings - 2 of 2

Use with caution in psychosis or bipolar disorder. Discontinuation of treatment may be appropriate in the presence of treatmentemergent psychotic or manic symptoms. While aggressive behavior is often observed in children or adolescents with ADHD, patients beginning treatment should be monitored for the appearance of or worsening of aggressive behavior or hostility. [Focalin XR PX 2006 p.11AB]

Suppression of growth has been reported with long-term use of stimulants. Stimulants should be used with caution in patients with a prior history of seizures or EEG abnormalities. Difficulties with accommodation and blurring of vision have been reported with stimulant treatment. (See WARNINGS.) [Focalin XR PI 2006
p.11C, 12ABC]

## Special Safety Issues: Controlled Substance Class

Focalin ${ }^{\circledR}$ XR is a Schedule II controlled substance [Focalin XR PI 2006 p.20A)

Should be given cautiously to patients with history of drug dependence or alcoholism [Focalin XR PI 2006 p.12D]
Chronic abuse can lead to marked tolerance and psychological dependence [Focalin XR PI 2006 p.12D]
Frank psychotic episodes can occur, especially with parenteral abuse [Focalin XR PI 2006 p.12D]
Withdrawal from abuse must be carefully supervised to monitor for severe depression [Focalin XR PI 2006 p.12D]
Withdrawal after chronic therapeutic use may unmask symptoms of underlying disorder that may require follow-up [Focalin XR PI 2006 p.12D]

These safety issues are class labeling and are not specific to
Focalin XR. /Greenhill 2002; p.28SA, 36SAB]
Focalin XR [package insert]. East Hanover, NJ: Novartis Pharmaceuticals Corporation; June 2006.

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## Focalin ${ }^{\circledR}$ XR: Dosing Flexibility

Capsule strengths: $5 \mathrm{mg}, 10 \mathrm{mg}$, and 20 mg [Focalin XR PI 2006 p. 1B]
Can administer by sprinkling capsule contents on applesauce [Focalin XR PI 2006 p. 21B]


## Dosage and Administration

## Recommended Dosing Guidelines

| Treatment-naïve patients [Focalin XR 2006 PI p. 21D,E] |  | $5 \mathrm{mg} / \mathrm{day}$ |
| :---: | :---: | :---: |
|  | Pediatric: | Dosage may be adjusted in $5-\mathrm{mg} /$ week intervals to a maximum of $20 \mathrm{mg} / \mathrm{day}$ for pediatric patients |
|  | Adult: | $10 \mathrm{mg} / \mathrm{day}$ <br> Dosage may be adjusted in $10-\mathrm{mg} /$ week intervals to a maximum of $20 \mathrm{mg} / \mathrm{day}$ for adults |
| Patients currently receiving racemic d,I-MPH [Focalin XR PI 2006 pg. 22A |  |  |
| Includes Ritalin® LA, Concerta ${ }^{\text {® }}$, and Metadate ${ }^{\oplus} \mathrm{CD}$ | adult: | racemic d,l-MPH |

## Focalin ${ }^{\circledR}$ XR: Dose Reduction and Discontinuation

Focalin XR dose should be reduced or drug discontinued if paradoxical aggravation of symptoms or other AEs occur [Focalin XR PI 2006 p. 22B]

If symptomatic improvement is not observed after appropriate dosage adjustment over 1 month, drug should be discontinued [Focalin XR PI 2006 p. 22C]

## Maintenance/Extended Treatment

No evidence from controlled trials to indicate how long patients with ADHD should be treated with Focalin ${ }^{\circledR}$ XR [Focalin XR PI 2006 p. 22D]
Pharmacological treatment may be needed for extended periods [Focalin XR PI 2006 p. 22D]
Effectiveness of Focalin XR for long-term use (>7 weeks) has not been systematically evaluated in controlled trials [Focalin XR PI 2006 p. 22D, 7A,B]
Patients should periodically be re-evaluated, with periods off medication [Focalin XR PI 2006 p. 22D]
Improvement may be sustained when the drug is temporarily or permanently discontinued [Focalin XR PI 2006 p. 22D]

## Summary of Focalin ${ }^{\circledR} \mathbf{X R}$ in Adults With ADHD <br> [summary slide; supported by previous slides]

Focalin XR provides improvements in core symptoms of ADHD in adults with a single daily dose Improvement in attention
Improvement in hyperactivity/impulsivity
Symptom improvement across multiple domains may reduce distractibility, enhance productivity, and improve social and family interactions
Rapid onset and all-day duration
Focalin XR is safe and tolerable in adults

## Case Study: NB

New Patient with Adult ADHD

## Clinical Case Study: NB

## Patient: NB

Visit Date: 2/8/06
CC: R/O ADHD
HPI: 36 y/o C $\delta^{\lambda}$. Employed as an insurance broker. Presenting with occupational and personal distress. Reports difficulty in the office, feels unproductive despite working >60 hrs/wk. Difficulty sitting through meetings, restlessness, frustration, interrupts others, makes inappropriate comments.
Social Hx: Hx of risk-taking behavior, poor driving record (2 speeding tickets in past month, MVA 1999), 3 jobs in 5 years. Divorced, no children. "Bad temper". Unremarkable school performance as a child (below average grades, some behavioral/disciplinary issues).

## Clinical Case Study: NB

Family Hx: Parents living and healthy. Divorced. 1 sister, healthy, second marriage, 3 children.
PMH: Pt denies any past medical problems
Medications: Pt denies taking any medications
Allergies: NKDA
PE: VS: BP 118/77, pulse 74, wt 185 Ibs height 5'10"
GEN: otherwise healthy appearing patient
HEENT: atraumatic/normocephalic, PERRL, EOMI, supple neck, no thyromegaly
Cardiovascular: regular heart rate and rhythm, w/o murmurs
Impression: ADHD hyperactive/impulsive subtype
Treatment Plan: Begin patient on ADHD medication - QD Focalin ${ }^{\circledR}$ XR $10 \mathrm{mg} /$ day to be titrated to $20 \mathrm{mg} /$ day

## Clinical Case Study: NB Discussion

Hyperactivity in adults is different than in children
Less obviously hyperactive
Talking excessively, "workaholic" but not effective, impatient, impulsive, traffic accidents/speeding, easily frustrated
ADHD medications indicated for adults include Strattera ${ }^{\circledR}$, Adderall $X R^{\circledR}$, and Focalin ${ }^{\circledR}$ XR

Stimulant medications to treat ADHD are safe, effective, and well-studied
Focalin XR was chosen as first-line treatment because it offers rapid onset and all-day duration of coverage with once-daily dosing and has a good tolerability profile

## Case Study: AV

New Patient with Adult ADHD

## Clinical Case Study: AV

Patient: AV
Visit Date: 1/13/06
CC: Referral to R/O ADHD
HPI: 28 y/o C 9 . Works for a telephone company, married, 2 children. Son has ADHD, his pediatrician referred AV to R/O ADHD. Forgetful, has a low frustration tolerance, argues with family a lot. Has difficulty being productive at work (procrastinates, does not finish tasks, disorganized). Has low self-esteem.
AV has found that she needs to stick to a schedule in order to get things done, but does not do well if plans change, family complains that she is inflexible. Unable to coordinate work and parenting/spouse demands. She is very concerned that her behavior is affecting her family.

## Clinical Case Study: AV

Social Hx: Smoker 1 pack/day. Social drinker. Lives with husband and 2 children. She received average grades when in school, used to "daydream" or "doodle" and miss or forget things. Never had many friends, but had a few close ones
Family Hx: Both parents living, 2 children, son w/ ADHD, otherwise healthy
PMH: Broken shoulder @ age 9, sprained wrist @ age 14.
Medications: Pt denies taking any medications
Allergies: NKDA
PE: VS: BP 111/72, pulse 70, wt 135 lbs height 5'4"
GEN: otherwise healthy appearing patient
HEENT: atraumatic/normocephalic, PERRL, EOMI, supple neck, no thyromegaly
Cardiovascular: regular heart rate and rhythm, w/o murmurs
Impression: ADHD inattentive subtype
Treatment Plan: Begin patient on ADHD medication - QD Focalin ${ }^{\circledR}$ XR $10 \mathrm{mg} /$ day to be titrated to $20 \mathrm{mg} /$ day

## Clinical Case Study: AV Discussion

Inattentive symptoms in adults may include:
Forgetfulness, losing things, organizational problems, overreacting to frustration, procrastination Inattentive subtype often missed in children Focalin XR has demonstrated improvements in the core symptoms of ADHD (including attention) with a single daily dose

Rapid onset and all-day duration
ADHD treatment may help AV with her disorganization and frustration, which may help improve her social and family interactions


## Treating ADHD


#### Abstract

Why ADHD treatment is important Children and adolescents with Attention Deficit Hyperactivity Disorder (ADHD), if untreated, are at risk for poor academic performance. Teen pregnancy, problems with peers, car accidents, and physical injuries occur at a higher rate. Untreated, children and teens with ADHD are also at risk of conduct disorders, delinquency, and drug or alcohol abuse.


Typically, adults with untreated ADHD experience academic hardships. These often start in childhood and are likely to worsen during college years. Untreated adults take longer to complete learning degrees. They are likely to have lower economic status, lower rates of employment, and more workrelated problems. Untreated adults also have more problems in their relationships, more driving accidents, and more addiction-from alcohol to gambling.

Living with ADHD doesn't have to be this way. People with ADHD have treatment choices. The results of untreated ADHD are serious and should not be ignored. There is no cure for ADHD. Proper treatment can help control symptoms, helping to reduce these risks.

Sometimes, it takes more than 1 approach to treat all the symptoms of ADHD. A total ADHD treatment plan can help. It combines the use of medicines with other forms of therapy. This can enhance the benefits of taking drugs. It can help you function better.

## Your total ADHD treatment plan

Your ADHD treatment plan may use standard medicines. You can also consider a host of alternative therapies. Your plan may include family and individual counseling and coaching. You can try behavior management or

For

- Healthcare

Professionals
Focalin(B)
XR en
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## CLICK HERE

to get your FREE
information-packed
"First Step for a Fast Start -
Living with ADHD* guidebook

If you dan't have prescription coverage and cantraford your medicines, visit:
www.pap, inovartis.com orcall $1=800-245-5356$
social skills training. Most important of all is educating yourself about the disorder.

The following sections give an overview of many things to consider as you put your personal plan together. Enlist the help of others as you make your plan. Consider people like a healthcare professional, family members, close friends, and coaches. It's all part of a team-based approach to your total ADHD treatment plan. It can provide far-reaching benefits to you and your whole family.

## ADHD Behavior Management

ADHD Counseling and Support

- ADHD Medical Treatments

Focaline XR (dexmethylphenidate HCl ) extended-release capsules is indicated for the treatment of Attention Deficit Hyperactivity Disorder (ADHD) in adults, adolescents, and children 6 years and older wilh ADHD. Focaling XR is available in $5,10,15$, and 20 mg extended-release capsules. Focalin(8) XR is indicated as an integral part of a total treatment program for ADHD that may include other measures (eg, psychological, educational, social) for patients with this syndrome.

Important Safety Information
Focalin(6) XR should not be used if you have significant anxiety, tension, or agitation; allergies to methylphenidate; glaucoma, tics or Tourette's syndrome, or a family history of Tourette's syndrome; or if you have been taking an MAOI (a type of drug) or have discontinued an MAOI in the last 14 days.

Tell your doctor about any past or current heart problems that you or a family member has. If you have serious heart conditions, including structural heart abrormalities, you should generally not take stimulant drug products such as Focaling XR. During treatment, tell your doctor if you develop any heart symploms or conditions.

Tell your doctor if you have symploms of depression, if you have been diagnosed with depression or bipolar disorder, or if you or a family member has a history of suicide, bipolar disorder, or depression. Curing treatment, tell your doclor if you develop any symptoms of depression or abnormal thoughts or behaviors.

Abuse of Focaline XR can lead to dependence. Tell your doctor if you have ever abused or been dependent on alcohol or drugs, or if you are now abusing or dependent on alcohol or drugs.

Slower growth (veight gain and/or height) has been reported with long-term use of stimulants in children. Silmulants should be used with caution in patients with a prior history of seizures. Visual disturbances have been reported in patients taking methylphenidate.
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