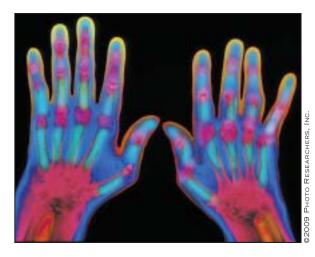
Color-enhanced X-ray of hands showing severe rheumatoid arthritis. Swelling and bone deformation (pink) is seen in finger joints between metacarpal and phalanges bones, and between the phalanges bones themselves. Most joints are ragged due to bone erosion, with the thumbs also affected.



## Early RA May Benefit From Prompt Infliximab

BY SALLY KOCH KUBETIN

he prompt addition of infliximab to methotrexate in patients with early rheumatoid arthritis who did not respond to brief monotherapy produced clinically superior results at 1 year, compared with adjuvant therapy with conventional disease-modifying antirheumatic drugs, according to the ongoing SWEFOT trial.

In addition, treating all patients with methotrexate monotherapy for 3-4 months screens out a sizeable proportion who would have been overtreated with the aggressive combination of methotrexate and infliximab, thus sparing them the increased risk for side effects as well

CADUET® (amlodipine besylate/atorvastatin calcium) Tablets
Brief Summary of Prescribing Information
INDICATIONS AND USAGE: CADUET (amlodipine and atorvastatin) is indicated in patients for whom treatment with both amlodipine and atorvastatin is appropriate. Amlodipine: 1. Hypertension: Amlodipine is indicated for the treatment of hypertension. It may be used alone or in combination with other antihypertensive agents; 2. Coronary Artery Disease (CAD): Chronic Stable Angina: Amlodipine is indicated for the treatment of chronic stable angina. Amlodipine may be used alone or in combination with other antihypertensive agents; Yasospastic Angina (Prinzmetal's or Variant Angina): Amlodipine is indicated for the treatment of confirmed or suspected vasospastic angina. Amlodipine may be used as monotherapy or in combination with other antianginal of antipicary antipicary antipicary and variance and procedure. AND Atorvastatin: 1. Prevention of antipicary and vintout heart failure or an ejection fraction <40%, amlodipine is indicated to reduce the risk of hospitation due to angina and to reduce the risk of coronary reascularization procedure. AND Atorvastatin: 1. Prevention of Cardiovascular Disease: In adult patients without clinically evident coronary heart disease, but with multiple risk factors for coronary heart disease such as age, smoking, hypertension, low HDL-C, or a family history of early coronary heart disease, but with multiple risk factors for coronary heart disease and without clinically evident coronary heart disease, but with multiple risk factors for coronary heart disease such as retinopathy, albuminuria, smoking, or hypertension, LIPITOR is indicated to:

-Reduce the risk of myocardial infarction

-reduce the risk of stroke; In patients with clinically evident coronary heart disease, LIPITOR is indicated to: -Reduce the risk of non-fatal myocardial infarction -Reduce the risk of fatal and non-fatal stroke -Reduce the risk of revascularization procedures -Reduce the risk of nospitalization for CHF -Reduce the risk of angina

-Reduce the risk of angina

2. Heterozygous Familial and Nonfamilial Hypercholesterolemia: Atorvastatin is indicated as an adjunct to diet to reduce elevated total-C, LDL-C, apo B, and TG levels and to increase HDL-C in patients with primary hypercholesterolemia (heterozygous familial and nonfamilial) and mixed dyslipidemia (Fredrickson Types IIa and IIb); 3. Elevated Serum TG Levels: Atorvastatin is indicated as an adjunct to diet for the treatment of patients with elevated serum TG levels (Fredrickson Type IV); 4. Primary Dysbetalipoproteinemia: Atorvastatin is indicated for the treatment of patients with primary dysbetalipoproteinemia (Fredrickson Type III) who do not respond adequately to diet; 5. Homozygous Familial Hypercholesterolemia: Atorvastatin is indicated to reduce total-C and LDL-C in patients with homozygous familial Hypercholesterolemia: Atorvastatin is indicated to reduce total-C and LDL-C in patients with homozygous family hypercholesterolemia as an adjunct to other lipid-lowering treatments (e.g., LDL apheresis) or if such treatments are unavailable; 6. Pediatric Patients: Atorvastatin is indicated as an adjunct to diet to reduce total-C, LDL-C, and apo B levels in boys and postmenarchal girls, 10 to 17 years of age, with heterozygous familial hypercholesterolemia if after an adequate trial of diet therapy the following findings are present:
a. LDL-C remains ≥ 190 mg/dL on:
b. LDL-C remains ≥ 190 mg/dL and:
there is a positive family history of premature cardiovascular disease or
two or more other CVD risk factors are present in the pediatric patients.

Therapy with lipid-altering agents should be a component of multiple-risk-factor intervention in individuals at increased risk for atherosclerotic vascular disease due to hypercholesterolemia. Lipid-altering agents should be used, in addition to a diet restricted in saturated fat and cholesterol, only when the response to diet and other nonpharmacological measures has been inadequate (see National Cholesterol Education Program (NCEP) Guidelines, summarized in Table 1).

Table 1. NCEP Treatment Guidelines: LDL-C Goals and Cutpoints for Therapeutic Lifestyle Changes and Drug Therapy in Different Risk Categories

Risk Category	LDL-C Goal (mg/dL)	LDL-C Level at Which to Initiate Therapeutic Lifestyle Changes (mg/dL)	LDL-C Level at Which to Consider Drug Therapy (mg/dL)
CHD® or CHD risk equivalents (10-year risk >20%)	<100	≥100	≥130 (100-129: drug optional) <sup>b</sup>
2+ Risk Factors (10-year risk ≤20%)	<130	≥130	10-year risk 10%-20%: ≥130 10-year risk <10%: ≥160
0-1 Risk Factor <sup>c</sup>	<160	≥160	≥190 (160-189: LDL-lowering drug optional)

0-1 Risk Factor³ <160 ≥160 drug optional)

\* CHD, coronary heart disease. \* Some authorities recommend use of LDL-lowering drugs in this category if an LDL-C level of < 100 mg/dL cannot be achieved by therapeutic lifestyle changes. Others prefer use of drugs that primarily modify triglycerides and HDL-C, e.g., nicotinic acid or fibrate. Clinical judgment also may call for deferring drug therapy in this subcategory. \* Almost all people with 0-1 risk factor have 10-year risk <10%; thus, 10-year risk sassessment in people with 0-1 risk factor is not necessary.

After the LDL-C goal has been achieved, if the TG is still > 200 mg/dL, non-HDL-C (total-C minus HDL-C) becomes a secondary target of therapy. Non-HDL-C goals are set 30 mg/d L nigher than LDL-C goals for each risk category. Prior to initiating therapy with atorvastatin, secondary causes for hypercholesterolemia (e.g., poorly controlled diabetes mellitus, hypothyroidism, nephrotic syndrome, dysproteinemias, obstructive liver disease, other drug therapy, and alcoholism) should be excluded, and a lipid profile performed to measure total-C, LDL-C, HDL-C, and TG. For patients with TG <400 mg/dL (<-4.5 mmol/L), LDL-C can be estimated using the following equation: LDL-C = total-C - (0.20 x [TG] + HDL-C): For TG levels <400 mg/dL (<-4.5 mmol/L), this equation is less accurate and LDL-C concentrations should be determined by ultracentrifugation. The antidyslipidemic component of CADUET has not been studied in conditions where the major lipoprotein abnormality is elevation of chylomicrons (\*fredrickson\* Types\* I and V). The NCEP classification of cholesterol levels in pediatric patients with a familial history of hypercholesterolemia or premature cardiovascular disease is summarized below:

classification of cholesterol levels in pediatric patients with a familial hi cardiovascular disease is summarized below: (able 2. NCEP Classification of Cholesterol Levels in Pediatric Patients

THE STATE OF THE S			
Category	Total-C (mg/dL)	LDL-C (mg/dL)	
Acceptable Borderline	<170 170-199	<110 110-129	
High	>200	>130	

Acceptable
Borderline
High

170-199
110-129
High

2200

CONTRAINDICATIONS: CADUET contains atorvastatin and is therefore contraindicated in patients with active liver disease or unexplained persistent elevations of serum transaminases. CADUET is contraindicated in patients with known hypersensitivity to any component of this medication. Pregnancy and Lactation: Atherosclerosis is a chronic process and discontinuation of lipid-lowering drugs during pregnancy should have little impact on the outcome of long-term therapy of primary hypercholesterolemia. Cholesterol and other products of cholesterol biosynthesis are essential components for fetal development (including synthesis of steroids and cell membranes). Since HMG-CoA reductase inhibitors decrease cholesterol synthesis and possibly the synthesis of other biologically active substances derived from cholesterol, they may cause fetal harm when administered to pregnant women. Therefore, HMG-CoA reductase inhibitors are contraindicated during pregnancy and in nursing mothers. CADUET, WHCH INCLUDES ATORNASTATIN, SHOULD BE ADMINISTERED TO WOMEN OF CHILDBEARING AGE ONLY WHEN SUCH PATIENTS ARE HIGHLY UNLIKELY TO CONCEIVE AND HAVE BEEN INFORMED OF THE POTENTIAL HAZARDS. If the patient becomes pregnant which exiting this drug, therapy should be discontinued and the patient apprised of the potential hazard to the fetus.

WARNINGS: Increased Angina and/or Myocardial Infarction: Rarely, patients, particularly those with severe obstructive coronary artery disease, have developed documented increased frequency, duration and/or severity of angina or acute myocardial infarction on starting calcium channel blocker therapy or at the time of dosage increase. The mechanism of this effect has not been elucidated. Liver Dysfunction: HMG-CoA reductase inhibitors, like some other lipid-lowering therapies, have been associated with blochemical and normalities of liver function. Persistent elevations (23 times the upper limit of normal [LILI] occurring on 2 or more occasions) in serum

= 2.10 times UN, Soud to considered in any patient with offline mysighs, mustic strategies of verbalists, and or matted because of the Children's could be auchted the times mysighs, mustic strategies or verbalists, and or matted because of the Children's could be auchted the times mysighs, mustic strategies or verbalists, and the control of the Children's could be auchted the first of the country of the control of the country of the coun gally resulted in a 3-fold increase in atorvastatin AUC. Concomitant administration of atorvastatin 20 mg with lopinamy lous intonawir (400 mg+100 mg twice daily) resulted in a 5-9-fold increase in atorvastatin AUC (see WARNINGS, Skeletal Muscle, and DOSAGE AND ADMINISTRATION). Itraconazole: Concomitant administration of atorvastatin (20 mg) was associated with a 2.5-3.-fold increase in atorvastatin AUC. Dittazem hydrochloride: Co-administration of atorvastatin (40 mg) with dilitazem (240 mg) was associated with higher plasma concentrations of atorvastatini. Cimetidine: Atorvastatin plasma concentrations and LDI-C reduction were not altered by co-administration of cimetidine. Grapefruit julice: Contains one or more components that inhibit CYP 3A4 and can increase plasma concentrations of atorvastatin. Experimental plasma concentrations and LDI-C reduction were not altered by co-administration of cimetidine. Grapefruit julice: Contains one or more components that inhibit CYP 3A4 and can increase plasma concentrations of atorvastatin and atorvastatin-metabolites are substrates of the OATP 1B1 transporter. Inhibitors of the OATP 1B1 (e.g. cyclosporine): Can increase the bioavailability of atorvastatin. Concomitant administration of atorvastatin 10 mg and cyclosporine 2. Indices of atorvastatin. AuC. In cases where co-administration of atorvastatin with cyclosporine 2. Indices of cyclosporine 2. Indices of

as the higher costs of therapy with a tumor necrosis factor inhibitor, according to Dr. Ronald F. van Vollenhoven, a rheumatologist at the Karolinska University Hospital in Stockholm, and his associates.

Some patients may lose important ground to RA during the first 3-4 months of treatment with methotrexate monotherapy. However, findings from a review of clinical trials with anti-TNF agents suggest that only negligible gains are achieved by immediate initiation of such agents, the investigators noted (Lancet 2009;374:459-66).

The trial conducted by Dr. van Vollenhoven and his associates involved 487 patients with rheumatoid arthritis of duration less than 1 year who were treated at any of 15 rheumatology centers in Sweden between October 2002 and December 2005. All patients were treated with methotrexate monotherapy for 3-4 months at a dosage of up to 20 mg/week. At the end of baseline therapy, 145 patients had responded well to methotrexate monotherapy, defined as a DAS28 of no more than 3.2; those patients continued on methotrexate monotherapy.

Of the remaining patients, 128 patients were randomized to receive the addition of infliximab to methotrexate. and 130 patients received sulfasalazine, hydroxychloroquine, and methotrexate. Of the other patients who did not continue in the trial, 27 were intolerant to methotrexate, 9 developed another illness, and 48 cited a variety of other reasons for withdrawing from the study.

At the end of 12 months, 105 of the 128 patients in the infliximab-plusmethotrexate group and 89 of the 130 patients in the sulfasalazine/hydroxychloroquine-plus-methotrexate group remained on their allocated treatment.

Of those, 50 of 128 patients (39%) on infliximab plus methotrexate achieved the primary outcome of a good EULAR response, compared with 32 of 130 patients (25%) on sulfasalazine/hydroxychloroquine plus methotrexate. The differences between the two treatment groups became statistically significant over time. The differences were very small and not statistically significant at 3 months when patients were initially randomized, but they increased at 6 months (P = .0988) and again at 12 months (P = .0160).

More patients in the infliximab-plusmethotrexate group achieved secondary outcomes than did those on sulfasalazine/hydroxychloroquine plus methotrexate. Secondary outcomes were EULAR good to moderate response, ACR 20, ACR 50, and ACR 70.

The study's findings "suggest that the most important information to be gathered from clinical trials in rheumatoid arthritis is not necessarily comparisons of agents, but rather the strategy of tight control, aiming for remission," Dr. Tuulikki Sokka and Dr. Theodore Pincus stated in an editorial.

Patients with rheumatoid arthritis have substantially better clinical status now than did their peers 2-3 decades ago, they noted. However, most of the improved status cannot be attributed to the use of biologic agents; improved clinical status began in 2000, before the availability of biologic agents, according to Dr. Sokka, a rheumatologist at Jyväskylä (Finland) Central Hospital, and Dr. Pincus of New York University Medical Center (Lancet 2009;374:430-2).

In addition, trials showing the most impressive results do not always involve biologic agents. Finally, findings from earlier trials comparing methotrexate monotherapy to methotrexate used in combination with a biologic suggest that many patients have clinical and radiologic responses to methotrexate that are as favorable as those to biologic agents or combinations, Dr. Sokka and Dr. Pincus said.

The Swedish Rheumatism Association and Schering-Plough provided funding for the SWEFOT study. The investigators declared no financial conflict of interest.

Internal Medicine News

Making Us

Thanks For

Source: PERQ/HCI Focus® Medical/Surgical

June 2009 8 Readership Summary; Internal Medicine Specialties Section, Tables 501-503 Projected Average Issue Readers.

stroke or TIA within the preceding 6 months, a higher incidence of hemorrhagic stroke was seen in the LIPITOR 80 mg group compared to placebo. Subjects with hemorrhagic stroke on study entry appeared to be at increased risk for

group compared to placebo. Subjects with hemorrhagic stroke on study entry appeared to be at increased risk for hemorrhagic stroke.

ADVERSE REACTIONS: CADUET: CADUET (almoldipine besylate/atorvastatin calcium) has been evaluated for safety of 1092 patients in double-blind placebo controlled studies treated for co-morbid hypertension and dyslipidemia. In general, treatment with CADUET was well tolerated. For the most part, adverse experiences have been mild or moderate in severity. In clinical trials with CADUET, no adverse experiences peculiar to this combination have been observed adverse experiences are semilar in terms of nature, severity, and frequency to those reported previously with amoldipine and atorvastatin. The following information is based on the clinical experience with amoldipine and atorvastatin. The Amoldipine and severate and foreign clinical trials. In general, treatment with amoldipine was well tolerated at doses up to 10 mg daily. Most adverse reactions reported during therapy with amoldipine were of mild or moderate severity. In controlled clinical trials directly companing amoldipine (N=1730) in doses up to 10 mg to placebo (N=1250), discontinuation and moldipine due to adverse reactions was required in only about 1.5% of patients and was not significantly different from placebo (about 1%). The most common side effects are headache and edema. The incidence (%) of side effects which occurred in a dose related manner are as follows:

Adverse Event	amlodipine			
	2.5 mg N=275	5.0 mg N=296	10.0 mg N=268	Placebo N=520
Edema	1.8	3.0	10.8	0.6
Dizziness	1.1	3.4	3.4	1.5
Flushing	0.7	1.4	2.6	0.0
Palpitations	0.7	1.4	4.5	0.6
Other adverse exp	eriences which were n	ot clearly dose related but	which were reported with an in	ncidence greater than

Placebo-Controlled Stud	dies	
Adverse Event	amlodipine (%) (N=1730)	Placebo (%) (N=1250)
Headache	7.3	7.8
Fatigue	4.5	2.8
Nausea	2.9	1.9
Abdominal Pain	1.6	0.3
Somnolence	1.4	0.6

For several adverse experiences that appear to be drug and dose related, there was a greater incidence in women than men associated with amlodipine treatment as shown in the following table:

Adverse Event	. amlo	dipine	Place	Placebo		
	M=%	F=%	M=%	F=%		
	(N=1218)	(N=512)	(N=914)	(N=336)		
Edema	5.6	14.6	1.4	5.1		
Flushing	1.5	4.5	0.3	0.9		
Palpitations	1.4	3.3	0.9	0.9		
Somnolence	1.3	1.6	0.8	0.3		
The following over	ato occurred in <10/	but >0.10/ of notionts t	rooted with emladining in our	strollad aliniaal tria		

Sommolence 1.3 0.8 0.3
The following events occurred in <1% but >0.1% of patients treated with ambdopine in controlled clinical trials or under conditions of open trials or marketing experience where a causal relationship is uncertain; they are listed to alert the physician to a possible relationship; Cardiovascular arrihythmia (including ventricular tachycardia and trial fibrillation), bradycardia, chest pain, hypotension, peripheral ischemia, syncope, tachycardia, postural dizziness, postural hypotension, vasculitis. Central and Peripheral Nervous System: hypoesthesia, neuropathy peripheral paresthesia, tremor, vertigo. Gastrointesthala: anorexia, constipation, dyspepsia,\* "dysphagia, diarrhae, flatulence, pancreatitis, vomiting, gingiyal hyperplasia. General: allergic reaction, asthenia,\* back pain, hot flushes, malaise, pain, rigors, weight gain, weight decrease. Musculoskeletal System: arthralga, arthrosis, muscle cramps,\* "myalgia. Psychiatric: sexual dysfunction (male\*\* and female), insomnia, nervousness, depression, abnormal dreams, anxiev, depersonalization. Respiratory System: dyspnea,\* espistaxis. Skin and Appendages: angloedema, erythema multiforme, pruritus,\*\* rash,\*\* rash erythematous, rash maculopapular \*\*These events occurred in less than 1% in placebo-controlled trials, but the incidence of these side effects was between 1% and 2% in all tuble dose studies. Special Senses: abnormal vision, conjunctivitis, diplopia, eye pain, tinnitus. Urinary System: micturition frequency, micturition disorder, nocturia. Autronomic Nervous System: dry mouth, sweating increased. Metabolic and Nutritional: hyperglycemia, thirst. Hemopoletic: leukopenia, purpura, thrombocytopenia. The following events occurred in <0.1% of patients treated with amlodipine in controlled clinical trials or under conditions of open trials or marketion. Nutritional: hyperglycemia, thirst. Hemopoietic: leukopenia, purpura, thrombocytopenia. The following events occurred in <a href="Coloring International Property of Parkets">Coloring Coloring Coloring

Body System/ Adverse Event	atorvastatin				
	Placebo N=270	10 mg N=863	20 mg N=36	40 mg N=79	80 mg N=94
BODY AS A WHOLE					
Infection	10.0	10.3	2.8	10.1	7.4
Headache	7.0	5.4	16.7	2.5	6.4
Accidental Injury	3.7	4.2	0.0	1.3	3.2
Flu Syndrome	1.9	2.2	0.0	2.5	3.2
Abdominal Pain	0.7	2.8	0.0	3.8	2.1
Back Pain	3.0	2.8	0.0	3.8	1.1
Allergic Reaction	2.6	0.9	2.8	1.3	0.0
Asthenia	1.9	2.2	0.0	3.8	0.0
DIGESTIVE SYSTEM					
Constipation	1.8	2.1	0.0	2.5	1.1
Diarrhea	1.5	2.7	0.0	3.8	5.3
Dyspepsia	4.1	2.3	2.8	1.3	2.1
Flatulence	3.3	2.1	2.8	1.3	1.1
RESPIRATORY SYSTEM					
Sinusitis	2.6	2.8	0.0	2.5	6.4
Pharyngitis	1.5	2.5	0.0	1.3	2.1
SKIN AND APPENDAGES					
Rash	0.7	3.9	2.8	3.8	1.1
MUSCULOSKELETAL SYSTE	M				
Arthralgia	1.5	2.0	0.0	5.1	0.0
Myalgia	1.1	3.2	5.6	1.3	0.0
Andle Coondinavian Cardia	Outcomes Trial (	ACCOTA IN ACCOT	(coo CLINICAL DU	ADMACOLOCY OF	inical Chudica





