

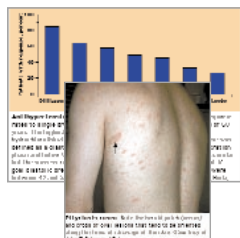
## Other Features:

### ▶ MEDLINE ABSTRACTS

Click on a reference number in the text or in the reference section at the bottom of a topic review to open.

### ▶ GRAPHICS

Click on the graphic links denoted by phrases such as “show figure”.

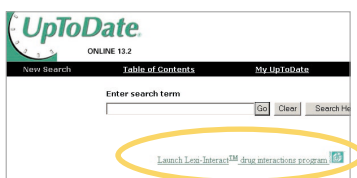


### ▶ DRUG DATABASE\*

Click on an underlined drug name in a topic review or search on a drug to access dosage, adverse reactions, and more.

### ▶ DRUG INTERACTIONS PROGRAM\*

Analyze drug interactions with Lexi-Interact, found on the main *UpToDate* search screen (online only).



\* In partnership with [www.lexi.com](http://www.lexi.com)



### ▶ WHAT'S NEW

Search on “what’s new” for a summary of new findings by specialty.

### ▶ PATIENT INFORMATION

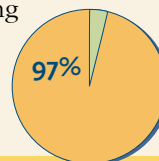
Search on “patient info” to access topics written for your patients.

### ▶ E-MAIL TO A COLLEAGUE

Share topic reviews and guest passes with colleagues and patients. Use “e-mail this to a colleague” at the top right-hand corner of topic reviews (online only).

## The Net Result of Using *UpToDate*:

- Clinicians find the information they are looking for in 93% of searches
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## User Guide

### How to answer clinical questions with *UpToDate*

Specialties included:

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Pediatrics  
Pulmonary and Critical Care Medicine  
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\* In development

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To access *UpToDate* Online, click on the *UpToDate* icon on your computer or go to:  
[www.uptodateonline.com](http://www.uptodateonline.com)



## Conducting a Search:

**1.**

Enter a single search term and click 'Go'

Search on a disease, symptom or drug name. *UpToDate* recognizes most medical terms and common abbreviations.

**2.**

"hypertension" matches 48 search terms

- Hypertension
- Hypertension, Acute newborn, Persistent pulmonary
- Hypertension, Accelerated
- Hypertension, Aldosterone
- Hypertension, Borderline
- Hypertension, Chronic thromboembolic pulmonary
- Hypertension, Cuff inflation
- Hypertension, Early morning
- Hypertension, Exercise induced
- Hypertension, Familial hyperkalemic (Type 2 pseudohypoaldosteronism)
- Hypertension, Gestational

Single click on a keyword

The first, most general term is often best in order to get the full list of matches.

**3.**

If needed, narrow the results

Combine multiple terms

Or narrow by category

If combining multiple terms, enter the additional search term and select a keyword from the resulting list, as you did in your original search.

**4.**

For pediatrics, click to list pediatric titles first.

Single click to select a topic

**5.**

Click on a heading in the outline to go directly to the section you need.

RECOMMENDATIONS

Choice of antihypertensive upon their ability to help prevent disease, if present:

- ALLHAT found that high risk with a thiazide than with an ACE inhibitor [29].
- The LIFE trial, in which the thiazide arm, reported a significant reduction in the subset of high-risk patients with left ventricular hypertrophy [29].
- ACE inhibitors and ARBs preferred in type 1 and 2 diabetes. (See "Treatment of hypertension in diabetes mellitus".)

However, the choice of one or the other is largely a matter of preference, since combination almost all patients with hypertension (regardless of blood pressure level) [54].

In an extensive analysis of patients with type 2 diabetes and hypertension, the only exception being non-diabetic patients from greater benefit from intensive blood pressure lowering, the patients [55]. The only exception being non-diabetic patients from greater benefit from intensive blood pressure lowering, the patients [55]. The only exception being non-diabetic patients from greater benefit from intensive blood pressure lowering, the patients [55].

Based upon ALLHAT, we generally recommend a low-dose antihypertensive agent. If low-dose antihypertensive agent is not tolerated, consider a combination of a low-dose thiazide and a low-dose ACE inhibitor or ARB.

Use 'Find' in the browser's 'Edit' menu to locate a specific word

receptor blockers — Two major trials, the RENAAL trial, demonstrated a clear benefit for losartan in the treatment of nephropathy due to type 2 diabetes [28,29]. In a, an ACE inhibitor was at least as effective as losartan in the treatment of nephropathy due to type 2 diabetes [28,29].

of the IDNT and RENAAL trials found that the combination of losartan and amlodipine was superior to the combination of atenolol and amlodipine in the development of and subsequent progression of nephropathy. A significant cardiovascular mortality reduction was observed in the losartan group. The two ARB trials were underpowered to detect a difference in cardiovascular benefit. (See "Treatment of hypertension in diabetes mellitus".)

In contrast, the LIFE trial, in which the efficacy of an antihypertensive agent was compared in high-risk patients [31,32]. As with (among) therapy in the developing type 2 diabetes (6 versus 9 percent) [31]. In the LIFE trial, the primary end point was the risk of cardiovascular mortality. The primary end point was the risk of cardiovascular mortality. The primary end point was the risk of cardiovascular mortality.

Unlike the RENAAL and lisinopril studies, the LIFE trial (whom 1105 were diabetic) was sufficiently powered to test the hypothesis that a thiazide-based therapy (sitting blood pressure) was superior to an ACE inhibitor-based therapy in the reduction of left ventricular hypertrophy [29].

In the LIFE diabetic trial substudy, all diabetic patients who were included in the primary end point analysis were between the ages of 55 and 80 who fulfilled the entry criteria included clinical hypertension (sitting blood pressure >160/90 mm Hg). The primary end point was the risk of cardiovascular mortality, myocardial infarction, or stroke, and the secondary end point was the risk of cardiovascular mortality, myocardial infarction, or stroke, and the secondary end point was the risk of cardiovascular mortality, myocardial infarction, or stroke.

The administration of losartan resulted in marked benefit in the subset of high-risk patients with type 2 diabetes who were associated with significant reductions in the primary end point (for atenolol), cardiovascular mortality (6 versus 10 percent versus 17 percent).

View the *UpToDate* tutorial at:  
[www.uptodate.com/learn](http://www.uptodate.com/learn)