

# Software review: a new database on the “Effects on Clinical Laboratory Tests” is now available

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## INFO

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**Disclosure:**

The database reviewed is not a  
product of Bio-Rad Laboratories.

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## SOFTWARE REVIEW

The American Association for Clinical Chemistry (AACC) in cooperation with the publisher John Wiley and Sons, Inc. (Wiley) built a new database on the information on interferences/effects of various laboratory tests due to drugs, diseases, herbs and the issues of the pre-analytical phase. AACC Effects on Clinical Laboratory Tests: Drugs, Disease, Herbs and Natural Products is an update of the major reference works edited by Dr. Donald Young:

- Effects of Drugs on Clinical Laboratory Tests;
- Effects of Disease on Clinical Laboratory Tests;
- Effects of Herbs and Natural Products on Clinical Laboratory Tests (co-edited with S. Narayan, PhD).

They are now available in an electronic format. As a promotion Wiley offers a free trial phase so that users may learn more about the useful database before they make a decision to buy it. Here is the link: <http://clinfx.wiley.com/aaccweb/aacc/>. The presentation, how the database can be used, will be done by using the analyte creatinine and a possible interference caused by acetaminophen.

Page 1 Login into the database – enter your e-mail address and a password

**AACC** EFFECTS ON CLINICAL LABORATORY TESTS  
Drugs, Disease, Herbs & Natural Products

**WILEY**

### Login

Email :

Password :

Login

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Page 2 Selection – in our example creatinine was chosen as the analyte which may have a possible interference

**AACC** EFFECTS ON CLINICAL LABORATORY TESTS  
Drugs, Disease, Herbs & Natural Products

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### Search Interactions

Test / Analyte :

Factor (Enter a Drug, Disease, Herb or Preanalytical variable) :

Factor Type (Limit search by choosing a type) : Disease Drug Prean Herb All

Effect (Limit search by selecting one effect) :

Mechanism : Analytical Physiological Both

Specimen :


ICD-9-CM :

Interaction explanation :


Search

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Page 3 Selection of possible effects – in our example “acetaminophen”




**EFFECTS ON CLINICAL LABORATORY TESTS**  
Drugs, Disease, Herbs & Natural Products




Query : Test = Creatinine  
1162 factors found

Icodextrin ( 2 )	Colchicum ( 1 )	Intraindividual Variation ( 22 )	Positive Predictive Value ( 1 )
α-Ketoglutarate ( 3 )	Colistimethate ( 1 )	Intralipid ( 6 )	Postpartum ( 1 )
β-Hydroxybutyrate ( 4 )	Colistin ( 4 )	Iodide ( 2 )	Potassium ( 3 )
γ-Globulin ( 1 )	Congenital Adrenal Hyperplasia ( 1 )	Iodine ( 1 )	Potassium Oxalate ( 4 )
1,2-Diaminopropane ( 1 )	Connective Tissue Disease ( 1 )	Iodixanol ( 3 )	Potassium Salts ( 1 )
ACE Inhibitors ( 5 )	Contact with Clot ( 1 )	Iodoaliphonic Acid ( 1 )	Pravastatin ( 3 )
Abacavir ( 1 )	Coronary Angiography ( 1 )	Iohexol ( 2 )	Prazosin ( 1 )
Acamprosate ( 1 )	Coronary Artery Disease ( 4 )	Iopamidol ( 4 )	Pre-eclampsia ( 19 )
Acebutolol ( 2 )	Corticosteroids ( 1 )	Iopanoic Acid ( 3 )	Prednisolone ( 4 )
Acetaminophen ( 24 )	Cortisone ( 1 )	Iopentol ( 1 )	Prednisone ( 11 )
Acetazolamide ( 3 )	Creatine ( 12 )	Ioversol ( 1 )	Pregabalin ( 1 )

Page 4 After clicking on “acetaminophen” one gets the following information and can refer to the original paper via PubMed



**EFFECTS ON CLINICAL LABORATORY TESTS**  
Drugs, Disease, Herbs & Natural Products



Query : Test = Creatinine Factor = Acetaminophen  
24 interactions found

Test/Analyte Name	Factor Name	Other	Explanation	Reference
Creatinine Clearance	Acetaminophen <i>syn : APAP; Acetylamino phenol; Anacin-38; Dorcol8; Dristan8; Excedrin8; Feverol™; Midrin8; N-Acetyl-p-Amino phenol; Panadol8; Paracetamol; Tempra; Tylenol8; Vanquish8; Acephen; Aceta; Acetaminophen Uniserts; Apacet; Anacin8; Children's Pain Reliever; Dapacin; Dynafed; Feverall; Genapap; Genebs; Halenol; Infants Pain Reliever; Liquipirin; Mapap; Maranax; Meda Cap/Tab; Neopap; Oraphen-PD; Redutemp; Ridenol; Silapap; Tapanol; Uni-Ace</i>	specimen : Urine effect : No Effect mechanism : Physiological	Without overdose not usually any effect	<a href="#">Analgesic nephropathy: a reassessment of the role of phenacetin and other analgesics</a> PubMed Search
Creatinine	Acetaminophen <i>syn : APAP; Acetylamino phenol; Anacin-38; Dorcol8; Dristan8; Excedrin8; Feverol™; Midrin8; N-Acetyl-p-Amino phenol; Panadol8; Paracetamol; Tempra; Tylenol8; Vanquish8; Acephen; Aceta; Acetaminophen Uniserts; Apacet; Anacin8; Children's Pain Reliever; Dapacin; Dynafed; Feverall; Genapap; Genebs; Halenol; Infants Pain Reliever; Liquipirin; Mapap; Maranax; Meda Cap/Tab; Neopap; Oraphen-PD; Redutemp; Ridenol; Silapap; Tapanol; Uni-Ace</i>	specimen : Serum effect : Increase mechanism : Physiological	In 21 patients who had taken accidental overdose peak concentration of 2.6 ± 2.6 mg/dL and of 1.0 ± 0.3 mg/dL in 50 patients with suicidal intent	<a href="#">Acetaminophen toxicity in an urban county hospital</a> PubMed Search

Page 5 Reference details are available via PubMed and one may search for more information directly in PubMed

The screenshot displays a web browser window titled "Reference Details - Windows Internet Explorer" with the URL <http://clinfx.wiley.com/aaccweb/aacc/reference?id=20972>. The page content is as follows:

**Reference Details**  
 Reference Title : Acetaminophen toxicity in an urban county hospital  
 Authors : Schiodt FV Rochling FA Casey DL Lee Wm  
 Publication : The New England journal of medicine.  
 Publisher :  
 Year : 1997  
 Pages : 1112-1117  
 Volume : 337  
 Issn : 0028-4793

Search [PubMed](#) for this reference.

The background of the screenshot shows a table with the following visible content:

Query : Tes					
24 interac					
Test/Ana					
Creatinine					usually any effect
Creatinine	<p><i>Dorcois; Dristanis; Exclearins; Feveriol ; Midrin®; N-Acetyl-p-Aminophenol; Panadol®; Paracetamol; Tempra; Tylenol®; Vanquish®; Acephen; Aceta; Acetaminophen Uniserts; Apacet; Anacin®; Children's Pain Reliever; Dapacin; Dynafed; Feverall; Genapap; Genebs; Halenol; Infants' Pain Reliever; Liqipirin; Mapap; Maranax; Meda Cap/Tab; Neopap; Oraphen-PD; Redutemp; Ridenol; Silapap; Tapanol; Uni-Ace</i></p>	specimen : Serum			
		effect : Increase			
		mechanism : Physiological			
					In 21 patients who had taken accidental overdose peak concentration of $2.6 \pm 2.6$ and of $1.0 \pm 0.3$ mg/dL in 50 patients with intent

If you would like to have further information on the database do not hesitate to contact me. Screenshots of "Effects on Clinical Laboratory Tests"

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