

University of Groningen

## Regulation of metabolizing enzymes and transporters for drugs and bile salts in human and rat intestine and liver

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*Document Version*

Publisher's PDF, also known as Version of record

*Publication date:*

2009

[Link to publication in University of Groningen/UMCG research database](#)

*Citation for published version (APA):*

Khan, A. A. (2009). *Regulation of metabolizing enzymes and transporters for drugs and bile salts in human and rat intestine and liver: a study with precision-cut slices*. s.n.

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**Regulation of Metabolizing Enzymes and Transporters  
for Drugs and Bile Salts in Human and Rat Intestine and Liver**

*- A study with precision-cut slices*

**Ansar Ali Khan**

The work described in this thesis was performed at the University of Groningen in the department of Pharmacokinetics, Toxicology and Targeting, which is part of the research school GUIDE.

ISBN: 97 8903674048-7

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Typesetting and layout by Ansar Ali Khan

Cover page concept and design by dr. Anil Rana and Ansar Ali Khan

Printed by IPSKAMP DRUKKERS, Enschede



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 groningen

**Regulation of Metabolizing Enzymes and Transporters  
for Drugs and Bile Salts  
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A study with precision-cut slices**

Proefschrift

ter verkrijging van het doctoraat in de  
Wiskunde en Natuurwetenschappen  
aan de Rijksuniversiteit Groningen  
op gezag van de  
Rector Magnificus, dr. F. Zwarts,  
in het openbaar te verdedigen op  
vrijdag 18 december 2009  
om 16.15 uur

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*Dedicated to my parents, wife and kids*



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