

ACCUMULATION OF DRUGS IN TISSUES

KRISHNAMURTHY VENKATESAN,¹ DEEPA BISHT,¹ AND
MOHAMMAD OWAIS²

¹National JALMA Institute for Leprosy and Other Mycobacterial Diseases, Agra, India

²Aligarh Muslim University, Aligarh, India

Contents

- 1 Introduction
 - 2 Movement of Drug Molecules Across Cell Barriers
 - 3 Absorption of Drugs
 - 3.1 Oral, Sublingual, and Rectal Administration
 - 3.2 Application to Epithelial Surfaces
 - 3.3 Administration by Inhalation
 - 3.4 Administration by Injection
 - 4 Drug Distribution
 - 4.1 Rate of Distribution
 - 4.2 Blood Perfusion
 - 4.3 Extent of Blood Distribution
 - 4.4 Physiological Barriers and Reservoirs Influencing Drug Distribution
 - 5 Important Proteins that Contribute to Drug Binding
 - 6 Volume of Distribution
 - 7 Influence of Lipophilicity and Lysosomal Accumulation on Tissue Drug Distribution
 - 8 Partition of the Drug into Fat and Other Tissues
 - 9 Special Drug Delivery Systems
- Acknowledgments
- References