

# Contents

<b>Preface</b>	<b>vii</b>
<b>1 Utilitarian Treatment of Heterogeneous Populations</b>	<b>1</b>
1.1 Studying Treatment Response to Inform Treatment Choice	1
1.2 The Planning Problem	3
1.3 Practices that Limit the Usefulness of Research on Treatment Response	11
<b>2 The Selection Problem</b>	<b>19</b>
2.1 Treatment Choice Using the Empirical Evidence Alone	20
2.2 Monotone Treatment Response	37
2.3 Exclusion Restrictions	49
<b>3 Treatment Using Experimental Data</b>	<b>56</b>
3.1 The Expected Welfare (Risk) of a Statistical Treatment Rule	56
3.2 Using a Randomized Experiment to Evaluate an Innovation	62
3.3 Using Covariate Information with Data from a Randomized Experiment	74

<b>4</b>	<b>The Selection Problem with Sample Data</b>	<b>108</b>
4.1	Sample-Analog Rules Using the Empirical Evidence Alone	109
	<b>References</b>	<b>115</b>