Stata Syntax for Section 10.6.1, Chapter 10

Stata Syntax for Section 10.6.1 (Modeling Doses of Treatment)

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//Chapter 10 Section 10.6.1 - modeling doses of treatment

cd "D:\psa\_e2\Chapter10\data"

set more off

use chpt10, replace

tab k\_adc

gen kadc\_ds=0

replace kadc\_ds=1 if k\_adc >0 & k\_adc < 34

replace kadc\_ds=2 if k\_adc >= 34

tab kadc\_ds

//Use multinomial logit model to predict generalized propensity scores

mlogit kadc\_ds pcg\_adc age97 mratio96 pcged97 black, baseoutcome(2)

predict prob0 prob1 prob2

list kadc\_ds prob0 prob1 prob2 in 1/5

sum prob0 prob1 prob2

//define inverse of the generalized p-scores as sampling weithts

gen dose\_w=1/prob0 if kadc\_ds==0

replace dose\_w=1/prob1 if kadc\_ds==1

replace dose\_w=1/prob2 if kadc\_ds==2

sum dose\_w

//create t-1 dummy variables to measure dose categories

gen kadc\_ds0=0

replace kadc\_ds0=1 if kadc\_ds==0

gen kadc\_ds1=0

replace kadc\_ds1=1 if kadc\_ds==1

tab kadc\_ds0

tab kadc\_ds1

//the following regression does not control for selection

regress lwss97 male black age97 pcged97 mratio96 pcg\_adc kadc\_ds0 kadc\_ds1, robust cluster(pcg\_id)

//the following regression controls for selection using inverse p-scores as weights

regress lwss97 male black age97 pcged97 mratio96 pcg\_adc kadc\_ds0 kadc\_ds1 [pweight=dose\_w], robust cluster(pcg\_id)

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