Supplementary Material for AAAI Submission titled *Monte Carlo Tree Search with Heuristic Evaluations using Implicit Minimax Backups*

1 Appendix A

This appendix includes details of the results of played games to determine the best baseline players.

1.1 Parameter Values for Breakthrough and Kalah

Technique	Parameter set
pd$x$	$\{0, 1, \ldots, 5, 8, 10, 12, 16, 20, 30, 50, 100, 1000\}$
det$x$	$\{.1, .2, .3, , .4, .5, .55, .6, .65, .7, .75, .8, .85, .9\}$
egeϵ	$\{0, .05, .1, .15, .2, .3, .4, .5, .6, .7, .8, .9, 1\}$
imα	$\{0, .05, .1, .15, \ldots, .55, .6, .75, 1\}$

Table 1: Parameter value sets.

1.2 Breakthrough Playout Optimization

1.2.1 Tournament Results

1.2.2 Tournament Winner Comparisons

mcts_h_ege0.1_det0.5_efv0 vs.	mcts_h_ege0.1_efv0:	738	262	0
mcts_h_ege0.1_det0.5_efv0 vs.	mcts_h_pd20_det0.5_efv0:	633	367	0
mcts_h_ege0.1_efv0 vs.	mcts_h_pd20_efv0:	557	443	0
mcts_h_ege0.1_efv0 vs.	mcts_h_pd4_efv0:	768	232	0