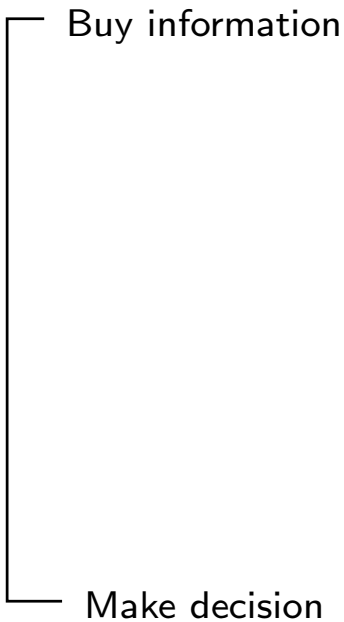
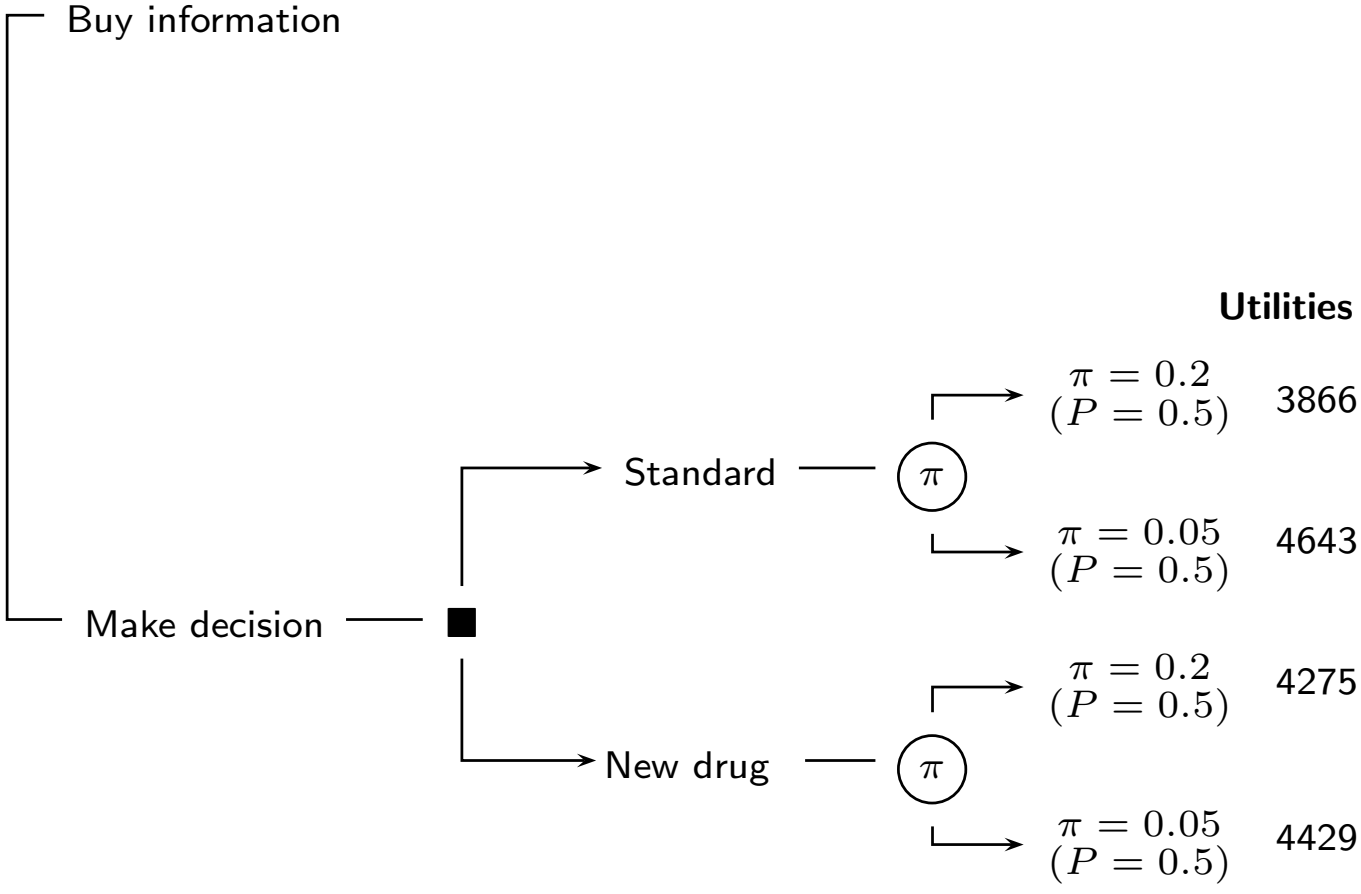
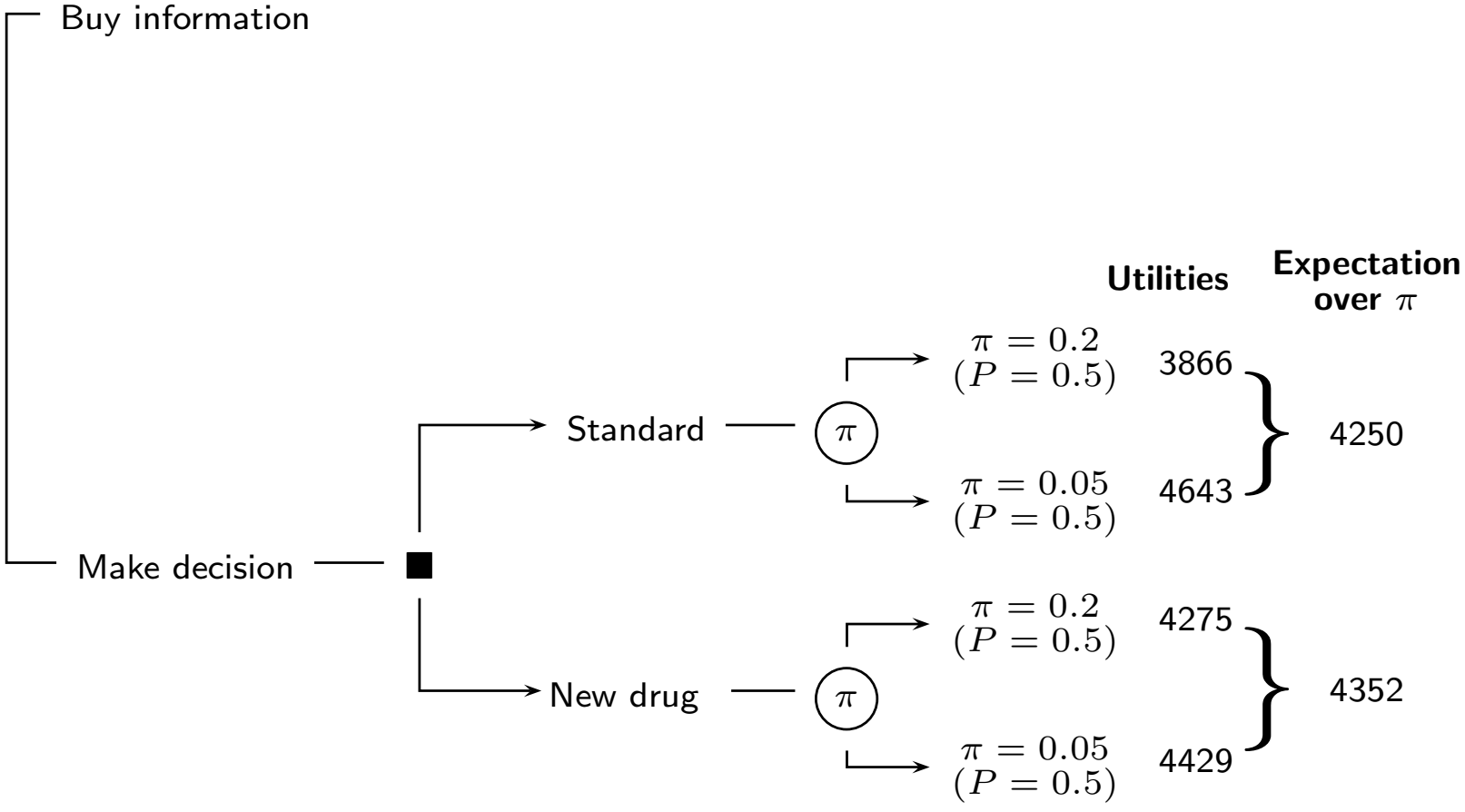
EVPI



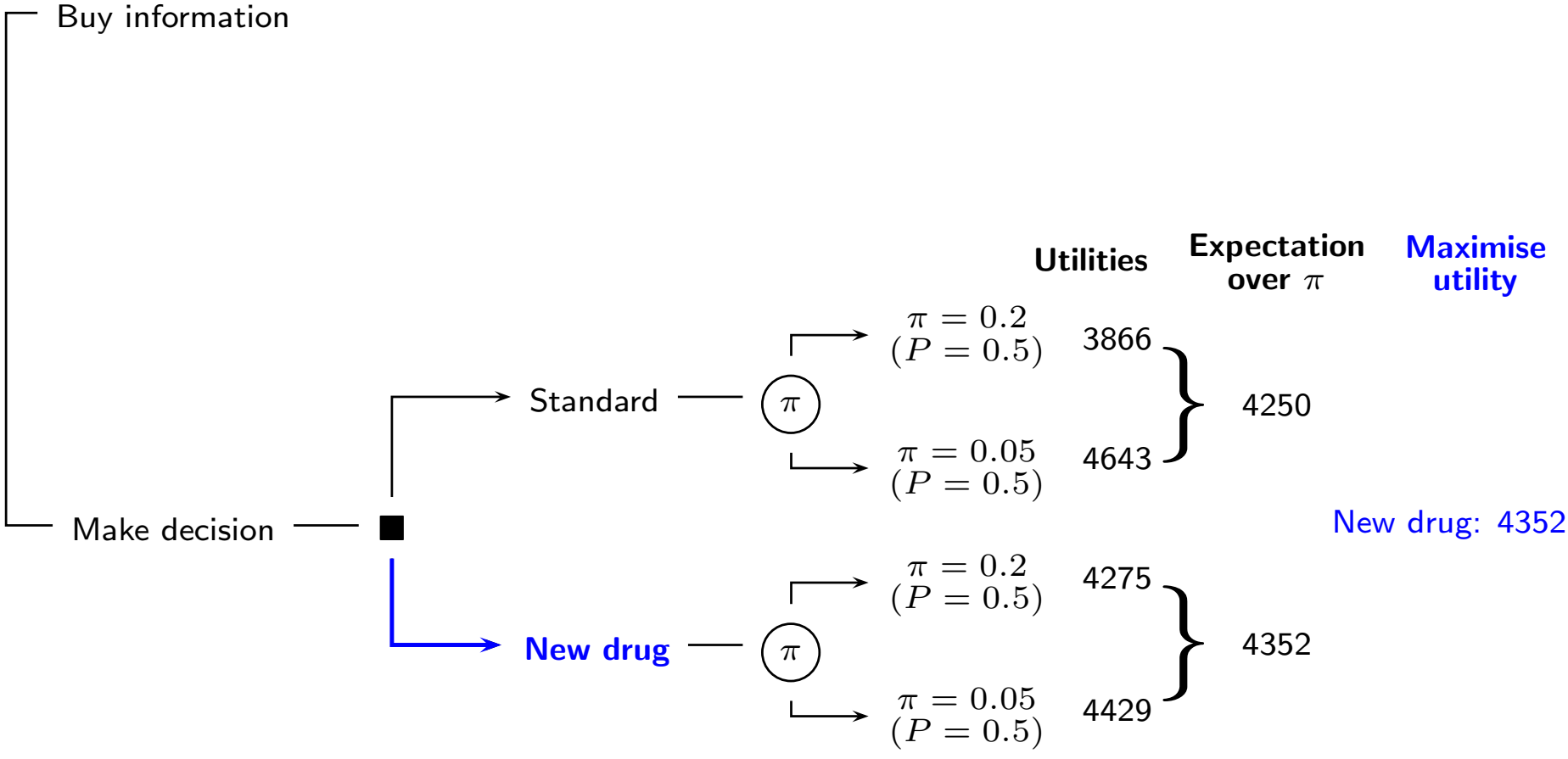
EVPI


Buy information
Make decision
Standard
New drug
π
π
Utilities
$\pi = 0.2$ $(P = 0.5)$
3866
$\pi = 0.05$ $(P = 0.5)$
4643
$\pi = 0.2$ $(P = 0.5)$
4275
$\pi = 0.05$ $(P = 0.5)$
4429

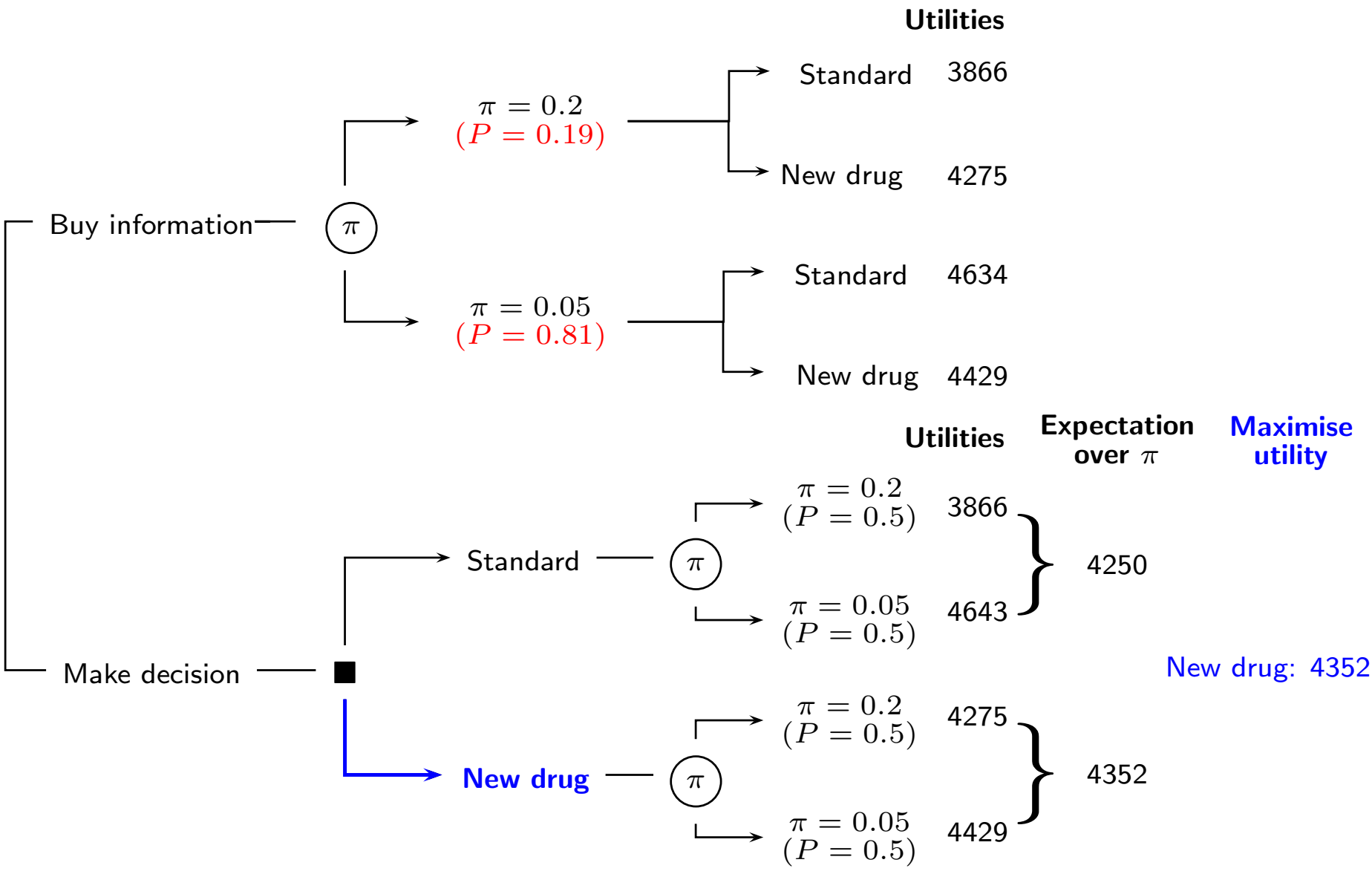
EVPI


Buy information
Make decision
Standard
New drug
π
π
Utilities
Expectation over π
π = 0.2 (P = 0.5)
π = 0.05 (P = 0.5)
π = 0.2 (P = 0.5)
π = 0.05 (P = 0.5)
3866
4643
4275
4429
4250
4352

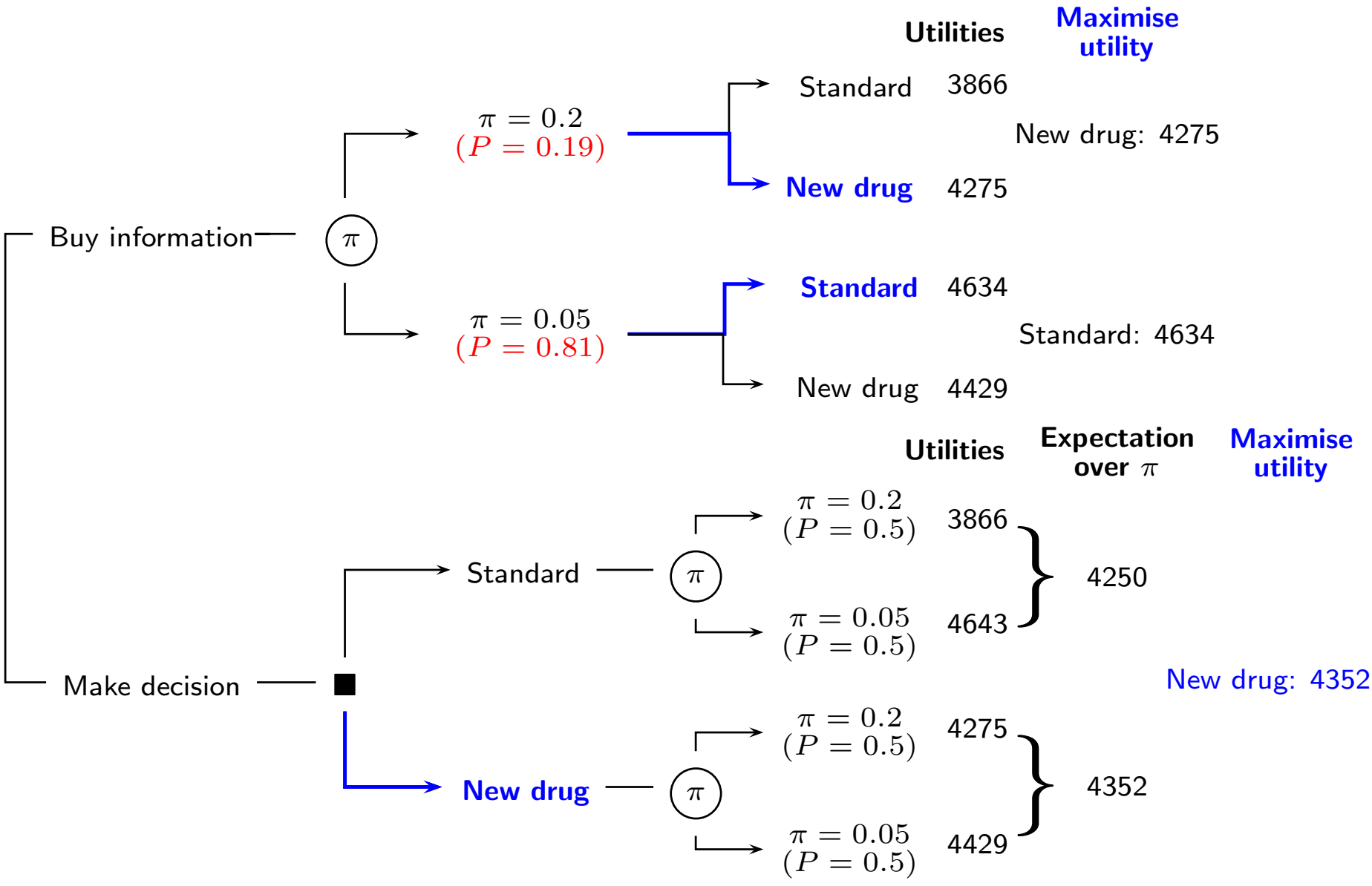
EVPI


Buy information
Make decision
Standard
New drug
π
π
π = 0.2
(P = 0.5)
π = 0.05
(P = 0.5)
π = 0.2
(P = 0.5)
π = 0.05
(P = 0.5)
Utilities
3866
4643
4275
4429
Expectation over π
4250
4352
Maximise utility
New drug: 4352

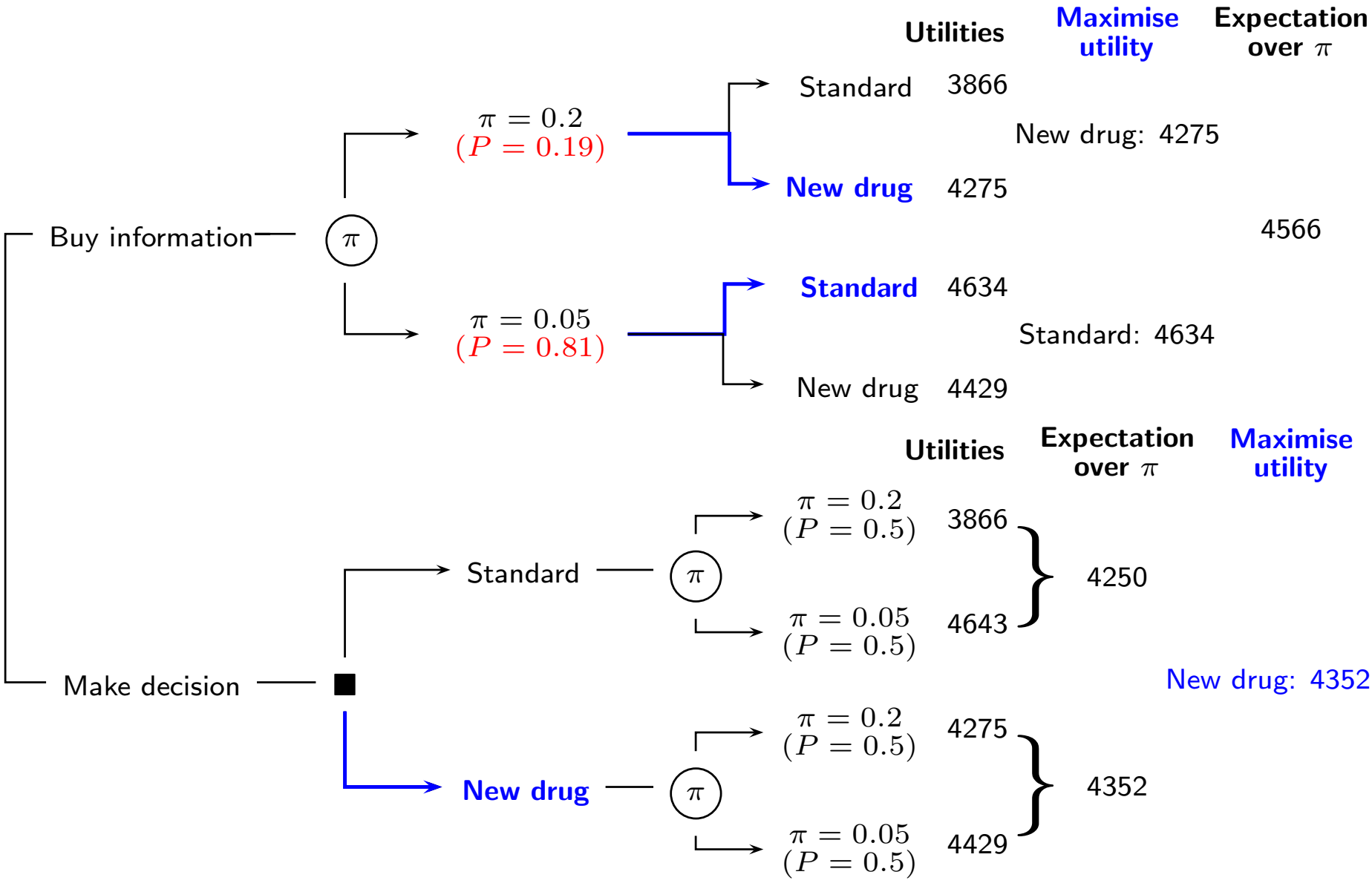
EVPI

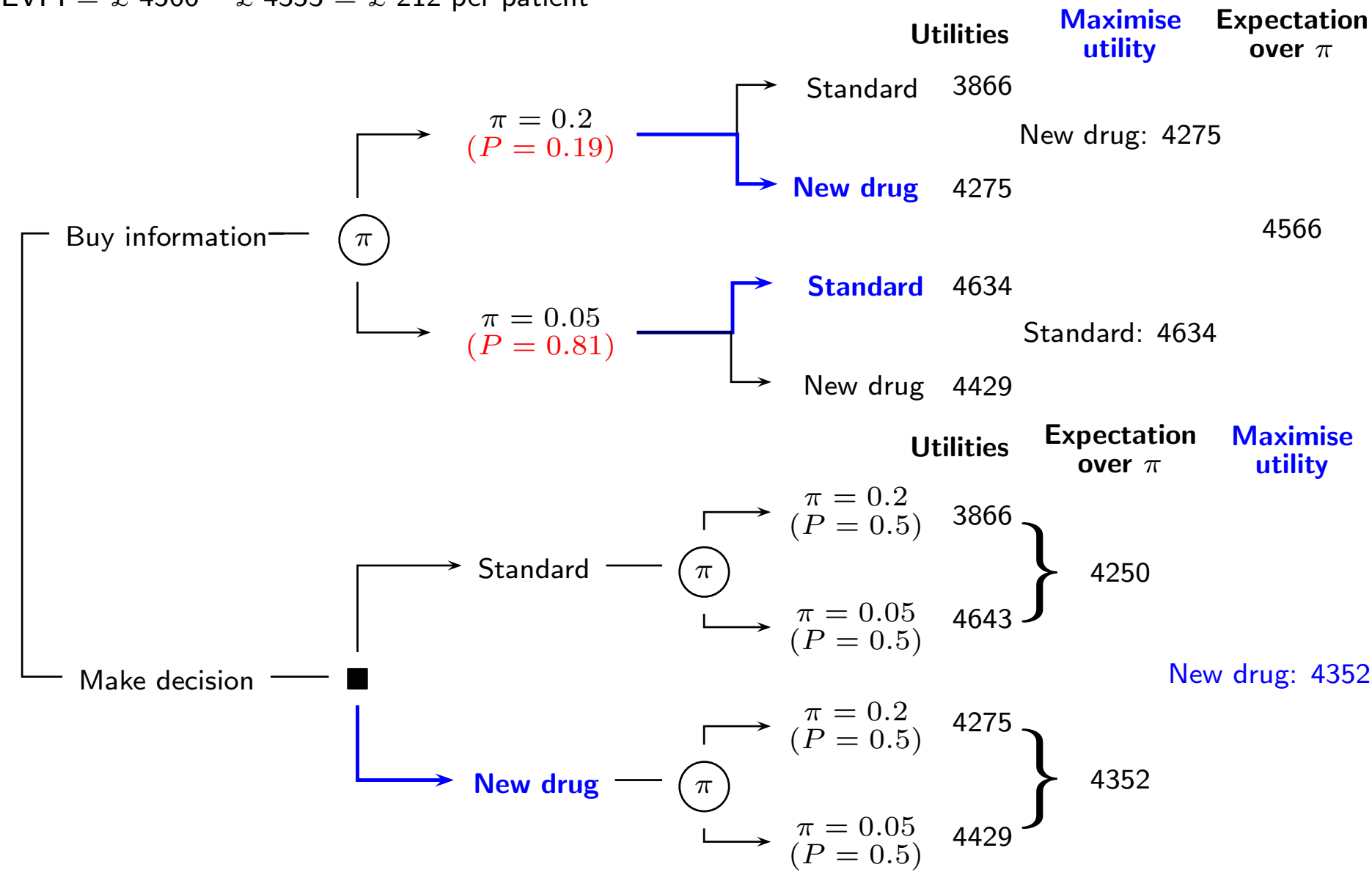

Utilities
Standard 3866
$\pi = 0.2$
$(P = 0.19)$
New drug 4275
Buy information
π
Standard 4634
$\pi = 0.05$
$(P = 0.81)$
New drug 4429
Utilities
Expectation over π
Maximise utility
$\pi = 0.2$
$(P = 0.5)$
3866
Standard
π
4250
$\pi = 0.05$
$(P = 0.5)$
4643
New drug: 4352
Make decision
$\pi = 0.2$
$(P = 0.5)$
4275
New drug
π
4352
$\pi = 0.05$
$(P = 0.5)$
4429

EVPI


Utilities
Maximise utility
Buy information
π
π = 0.2
(P = 0.19)
Standard 3866
New drug 4275
New drug: 4275
π = 0.05
(P = 0.81)
Standard 4634
New drug 4429
Standard: 4634
Utilities
Expectation over π
Maximise utility
Make decision
Standard
π = 0.2
(P = 0.5)
3866
π = 0.05
(P = 0.5)
4643
4250
New drug: 4352
New drug
π = 0.2
(P = 0.5)
4275
π = 0.05
(P = 0.5)
4429
4352

EVPI


Utilities
Maximise utility
Expectation over π
Buy information
π
$\pi = 0.2$
$(P = 0.19)$
Standard 3866
New drug 4275
New drug: 4275
4566
$\pi = 0.05$
$(P = 0.81)$
Standard 4634
New drug 4429
Standard: 4634
Utilities
Expectation over π
Maximise utility
Make decision
Standard
$\pi = 0.2$
$(P = 0.5)$ 3866
$\pi = 0.05$
$(P = 0.5)$ 4643
4250
New drug: 4352
New drug
$\pi = 0.2$
$(P = 0.5)$ 4275
$\pi = 0.05$
$(P = 0.5)$ 4429
4352

EVPI

EVPI = £ 4566 – £ 4353 = £ 212 per patient