



Model settings | **Model results** | Probabilistic results

Model results

Outcome	Oral sema 7mg	Lusefi 2.5mg	Incremental
Overall survival, y	16.71	16.64	0.07
Percent alive at time horizon	0.0%	0.0%	0.0%
Discounted QALYs	11.32	11.25	0.06

Cumulative events within time horizon	Oral sema 7mg	Lusefi 2.5mg	Incremental
Coronary heart disease	39.9%	40.0%	-0.1%
Stroke	39.3%	39.5%	-0.2%
Retinopathy	48.1%	49.5%	-1.4%
Overt nephropathy	7.3%	7.4%	-0.1%
ESRD	6.0%	6.1%	-0.1%
Hemodialysis	4.2%	4.3%	-0.1%
Amputation	1.9%	2.0%	-0.1%
Hypoglycemia			
Non-severe	0.41	0.41	0.00
Severe	0.00	0.00	0.00

Abbreviations: ESRD = end stage renal disease.

Discounted Costs (¥)	Oral sema 7mg	Lusefi 2.5mg	Incremental
Diabetes drug costs			
Oral sema 7mg or Lusefi 2.5mg	¥348,874	¥177,860	¥171,014
Treatment intensification	¥2,078,150	¥2,068,784	¥9,366
Diabetes management (no complications)	¥4,949,778	¥4,930,164	¥19,614
Complications			
Coronary heart disease	¥517,364	¥523,110	-¥5,745
Stroke	¥596,799	¥607,976	-¥11,177
Retinopathy	¥1,238,913	¥1,320,235	-¥81,322
Overt nephropathy	¥34,230	¥35,406	-¥1,176
ESRD	¥42,697	¥44,613	-¥1,916
Hemodialysis	¥106,532	¥112,793	-¥6,261
Amputation	¥54,906	¥59,620	-¥4,713
Hypoglycemia			
Non-severe	¥0	¥0	¥0
Severe	¥0	¥0	¥0

Abbreviations: ESRD = end stage renal disease.

Results	Oral sema 7mg	Lusefi 2.5mg	Incremental
Total Discounted Costs	¥9,968,243	¥9,880,561	¥87,683
ICER		¥1,399,233	



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Model structure

Model inputs

Treatment settings & results

Figures

Print

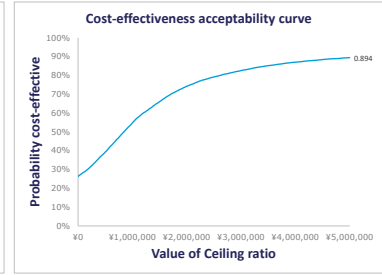
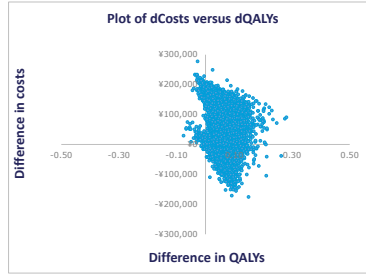
Model settings | Model results | Probabilistic results

Probabilistic settings

Number of PSA simulations 10,000

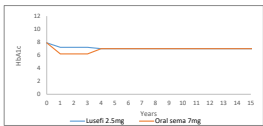
Probabilistic results

Outcome	Mean	Median	95% CI
Incremental costs	¥48,854	¥46,424	¥-84,456 to ¥181,199
Incremental QALYs	0.06	0.05	0 to 0.13
ICER (mean)	¥861,701		
Probability of cost-effectiveness at JPY/QALY	¥5,000,000		89.5%
Run PSA			



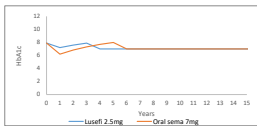


HbA_{1c} | SBP | Cholesterol | Smokers | BMI | All



Option A - Based on duration of use

Year	Oral sema 7mg	Lusefi 2.5mg
0	7.90	7.90
1	6.20	7.21
2	6.20	7.21
3	6.20	7.21
4	7.00	7.00
5	7.00	7.00
6	7.00	7.00
7	7.00	7.00
8	7.00	7.00
9	7.00	7.00
10	7.00	7.00
11	7.00	7.00
12	7.00	7.00
13	7.00	7.00
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32	7.00	7.00
33	7.00	7.00
34	7.00	7.00
35	7.00	7.00
36	7.00	7.00
37	7.00	7.00
38	7.00	7.00
39	7.00	7.00
40	7.00	7.00
41	7.00	7.00



Option B - Based on HbA_{1c} threshold

Year	Oral sema 7mg	Lusefi 2.5mg
0	7.90	7.90
1	6.20	7.21
2	6.83	7.59
3	7.31	7.90
4	7.69	7.00
5	7.99	7.00
6	7.00	7.00
7	7.00	7.00
8	7.00	7.00
9	7.00	7.00
10	7.00	7.00
11	7.00	7.00
12	7.00	7.00
13	7.00	7.00
14	7.00	7.00
15	7.00	7.00
16	7.00	7.00
17	7.00	7.00
18	7.00	7.00
19	7.00	7.00
20	7.00	7.00
21	7.00	7.00
22	7.00	7.00
23	7.00	7.00
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26	7.00	7.00
27	7.00	7.00
28	7.00	7.00
29	7.00	7.00
30	7.00	7.00
31	7.00	7.00
32	7.00	7.00
33	7.00	7.00
34	7.00	7.00
35	7.00	7.00
36	7.00	7.00
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38	7.00	7.00
39	7.00	7.00
40	7.00	7.00
41	7.00	7.00

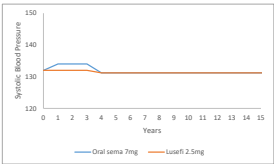
Computational sheet tracking HbA_{1c} over time for the two treatments. The user can decide whether to use Option A or Option B on the Treatment Settings tab.

Risk factors

	HbA _{1c}	SBP	TC/HDL	Smoking
alpha	-0.024	0.03	-0.021	-4.020
ln(Year)	0.144	0.039		
Year 2				-0.203
Year 2	-0.333			
AGE				-0.027
FEMALE				-0.489
LHbA1C	0.759			
HbA1c base	0.085			
SMOK. BASE				4.879

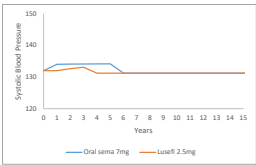


HbA_{1c} | SBP | Cholesterol | Smokers | BMI | All



Option A - Based on duration of use

Year	Oral sema 7mg	Lusefi 2.5mg
0	132.0	132.0
1	134.0	132.0
2	134.0	132.0
3	134.0	132.0
4	131.2	131.2
5	131.2	131.2
6	131.2	131.2
7	131.2	131.2
8	131.2	131.2
9	131.2	131.2
10	131.2	131.2
11	131.2	131.2
12	131.2	131.2
13	131.2	131.2
14	131.2	131.2
15	131.2	131.2
16	131.2	131.2
17	131.2	131.2
18	131.2	131.2
19	131.2	131.2
20	131.2	131.2
21	131.2	131.2
22	131.2	131.2
23	131.2	131.2
24	131.2	131.2
25	131.2	131.2
26	131.2	131.2
27	131.2	131.2
28	131.2	131.2
29	131.2	131.2
30	131.2	131.2
31	131.2	131.2
32	131.2	131.2
33	131.2	131.2
34	131.2	131.2
35	131.2	131.2
36	131.2	131.2
37	131.2	131.2
38	131.2	131.2
39	131.2	131.2
40	131.2	131.2
41	131.2	131.2



Option B - Based on HbA_{1c} threshold

Year	Oral sema 7mg	Lusefi 2.5mg
0	132.0	132.0
1	134.0	132.0
2	134.1	132.6
3	134.1	133.1
4	134.1	131.2
5	134.1	131.2
6	131.2	131.2
7	131.2	131.2
8	131.2	131.2
9	131.2	131.2
10	131.2	131.2
11	131.2	131.2
12	131.2	131.2
13	131.2	131.2
14	131.2	131.2
15	131.2	131.2
16	131.2	131.2
17	131.2	131.2
18	131.2	131.2
19	131.2	131.2
20	131.2	131.2
21	131.2	131.2
22	131.2	131.2
23	131.2	131.2
24	131.2	131.2
25	131.2	131.2
26	131.2	131.2
27	131.2	131.2
28	131.2	131.2
29	131.2	131.2
30	131.2	131.2
31	131.2	131.2
32	131.2	131.2
33	131.2	131.2
34	131.2	131.2
35	131.2	131.2
36	131.2	131.2
37	131.2	131.2
38	131.2	131.2
39	131.2	131.2
40	131.2	131.2
41	131.2	131.2

Computational sheet tracking SBP over time for the two treatments. The user can decide whether to use Option A or Option B on the Treatment Settings tab.



Long-term cost-effectiveness model for Japanese patients with type 2 diabetes

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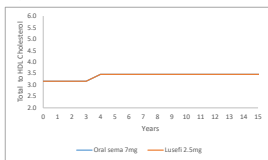
Model structure

Model inputs

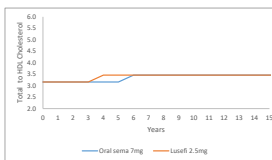
Treatment settings & results

Figures

HbA_{1c} | SBP | Cholesterol | Smokers | BMI | All



Option A - Based on duration of use



Computational sheet tracking cholesterol over time for the two treatments. The user can decide whether to use Option A or Option B on the Treatment Settings tab.

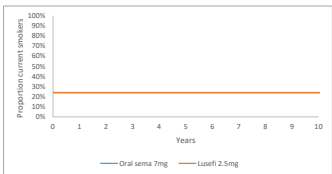
Option B - Based on HbA_{1c} threshold

Year	Oral sema 7mg	Lusefi 2.5mg
0	3.16	3.16
1	3.16	3.16
2	3.16	3.16
3	3.16	3.16
4	3.46	3.46
5	3.46	3.46
6	3.46	3.46
7	3.46	3.46
8	3.46	3.46
9	3.46	3.46
10	3.46	3.46
11	3.46	3.46
12	3.46	3.46
13	3.46	3.46
14	3.46	3.46
15	3.46	3.46
16	3.46	3.46
17	3.46	3.46
18	3.46	3.46
19	3.46	3.46
20	3.46	3.46
21	3.46	3.46
22	3.46	3.46
23	3.46	3.46
24	3.46	3.46
25	3.46	3.46
26	3.46	3.46
27	3.46	3.46
28	3.46	3.46
29	3.46	3.46
30	3.46	3.46
31	3.46	3.46
32	3.46	3.46
33	3.46	3.46
34	3.46	3.46
35	3.46	3.46
36	3.46	3.46
37	3.46	3.46
38	3.46	3.46
39	3.46	3.46
40	3.46	3.46
41	3.46	3.46

Year	Oral sema 7mg	Lusefi 2.5mg
0	3.16	3.16
1	3.16	3.16
2	3.16	3.16
3	3.16	3.16
4	3.16	3.46
5	3.16	3.46
6	3.46	3.46
7	3.46	3.46
8	3.46	3.46
9	3.46	3.46
10	3.46	3.46
11	3.46	3.46
12	3.46	3.46
13	3.46	3.46
14	3.46	3.46
15	3.46	3.46
16	3.46	3.46
17	3.46	3.46
18	3.46	3.46
19	3.46	3.46
20	3.46	3.46
21	3.46	3.46
22	3.46	3.46
23	3.46	3.46
24	3.46	3.46
25	3.46	3.46
26	3.46	3.46
27	3.46	3.46
28	3.46	3.46
29	3.46	3.46
30	3.46	3.46
31	3.46	3.46
32	3.46	3.46
33	3.46	3.46
34	3.46	3.46
35	3.46	3.46
36	3.46	3.46
37	3.46	3.46
38	3.46	3.46
39	3.46	3.46
40	3.46	3.46
41	3.46	3.46



HbA_{1c} | SBP | Cholesterol | **Smokers** | BMI | All



Computational sheet tracking smoking status over time for the two treatments. The user can decide whether to use Option A or Option B on the Treatment Settings tab.

Smoking status

Year	xb	Oral sema 7mg	Lusefi 2.5mg
0		0.24	0.24
1	-5.98	0.24	0.24
2	-6.18	0.24	0.24
3	-6.39	0.24	0.24
4	-6.59	0.24	0.24
5	-6.79	0.24	0.24
6	-7.00	0.24	0.24
7	-7.20	0.24	0.24
8	-7.40	0.24	0.24
9	-7.61	0.24	0.24
10	-7.81	0.24	0.24
11	-8.01	0.24	0.24
12	-8.21	0.24	0.24
13	-8.42	0.24	0.24
14	-8.62	0.24	0.24
15	-8.82	0.24	0.24
16	-9.03	0.24	0.24
17	-9.23	0.24	0.24
18	-9.43	0.24	0.24
19	-9.64	0.24	0.24
20	-9.84	0.24	0.24
21	-10.04	0.24	0.24
22	-10.24	0.24	0.24
23	-10.45	0.24	0.24
24	-10.65	0.24	0.24
25	-10.85	0.24	0.24
26	-11.06	0.24	0.24
27	-11.26	0.24	0.24
28	-11.46	0.24	0.24
29	-11.67	0.24	0.24
30	-11.87	0.24	0.24
31	-12.07	0.24	0.24
32	-12.27	0.24	0.24
33	-12.48	0.24	0.24
34	-12.68	0.24	0.24
35	-12.88	0.24	0.24
36	-13.09	0.24	0.24
37	-13.29	0.24	0.24
38	-13.49	0.24	0.24
39	-13.70	0.24	0.24
40	-13.90	0.24	0.24
41	-14.10	0.24	0.24



Long-term cost-effectiveness model for Japanese patients with type 2 diabetes

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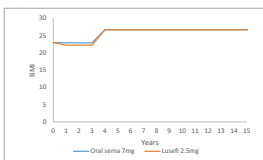
Model structure

Model inputs

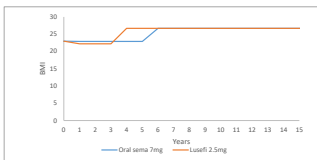
Treatment settings & results

Figures

HbA_{1c} | SBP | Cholesterol | Smokers | BMI | All



Option A - Based on duration of use



Option B - Based on HbA_{1c} threshold

Computational sheet tracking BMI over time for the two treatments. The user can decide whether to use Option A or Option B on the Treatment Settings tab.

Year	Oral sema 7mg	Lusefi 2.5mg
0	23.00	23.00
1	22.91	22.22
2	22.91	22.22
3	22.91	22.22
4	26.70	26.70
5	26.70	26.70
6	26.70	26.70
7	26.70	26.70
8	26.70	26.70
9	26.70	26.70
10	26.70	26.70
11	26.70	26.70
12	26.70	26.70
13	26.70	26.70
14	26.70	26.70
15	26.70	26.70
16	26.70	26.70
17	26.70	26.70
18	26.70	26.70
19	26.70	26.70
20	26.70	26.70
21	26.70	26.70
22	26.70	26.70
23	26.70	26.70
24	26.70	26.70
25	26.70	26.70
26	26.70	26.70
27	26.70	26.70
28	26.70	26.70
29	26.70	26.70
30	26.70	26.70
31	26.70	26.70
32	26.70	26.70
33	26.70	26.70
34	26.70	26.70
35	26.70	26.70
36	26.70	26.70
37	26.70	26.70
38	26.70	26.70
39	26.70	26.70
40	26.70	26.70
41	26.70	26.70

Year	Oral sema 7mg	Lusefi 2.5mg
0	23.00	23.00
1	22.91	22.22
2	22.91	22.22
3	22.91	22.22
4	22.91	26.70
5	22.91	26.70
6	26.70	26.70
7	26.70	26.70
8	26.70	26.70
9	26.70	26.70
10	26.70	26.70
11	26.70	26.70
12	26.70	26.70
13	26.70	26.70
14	26.70	26.70
15	26.70	26.70
16	26.70	26.70
17	26.70	26.70
18	26.70	26.70
19	26.70	26.70
20	26.70	26.70
21	26.70	26.70
22	26.70	26.70
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25	26.70	26.70
26	26.70	26.70
27	26.70	26.70
28	26.70	26.70
29	26.70	26.70
30	26.70	26.70
31	26.70	26.70
32	26.70	26.70
33	26.70	26.70
34	26.70	26.70
35	26.70	26.70
36	26.70	26.70
37	26.70	26.70
38	26.70	26.70
39	26.70	26.70
40	26.70	26.70
41	26.70	26.70