

**Supplementary file 2.** Scenario-based affordability assessment for type 2 diabetes

Therapy Phase	NO	Generic Name	Dose	Dosage Form	Insurance coverages (%)	Dose of Administration/day	Treatment response	Affordability ratio	
<b>Mono Therapy</b>	1	Metformin	500 mg	TABLET	70	500mg/day	Yes	0.02	
						The dose is increased by 50% every 7 days	No	0.06	
	2	Glibenclamide	5 mg	TABLET	70	2.5mg/day	Yes	0.004	
						The dose is increased by 50% every 7 days	No	0.01	
	3	Gliclazide	80 mg	TABLET	70	40mg/day	Yes	0.01	
						The dose is increased by 50% every 7 days	No	0.03	
<b>Dual Therapy</b>	1	Metformin+Acarbose	Metformin	500 mg	TABLET	70	1500mg/day	Yes	0.09
			Acarbose	50 mg	TABLET	70	25mg/day		
			Metformin	500 mg	TABLET	70	1500mg/day	No	0.1
			Acarbose	50 mg	TABLET	70	50mg/day		
	2	Metformin+Repaglinide	Metformin	500 mg	TABLET	70	1500mg/day	Yes	0.38 and

			Repaglinide	1 mg	TABLET	70	base on HgA1C <8% 0.5 tid >8% 1tid		0.22
			Metformin	500 mg	TABLET	70	1500mg/day	No	0.80
			Repaglinide	1 mg	TABLET	70	16 mg/day		
3	Metformin+Glibenclamide		Metformin	500 mg	TABLET	70	1500mg/day	Yes	0.07
			Glibenclamide	5 mg	TABLET	70	2.5mg/day		
			Metformin	500 mg	TABLET	70	1500mg/day	No	0.07
			Glibenclamide	5 mg	TABLET	70	12.5mg/day		
4	Metformin+Gliclazide		Metformin	500 mg	TABLET	70	1500mg/day	Yes	0.08
			Gliclazide	80 mg	TABLET	70	40mg/day		
			Metformin	500 mg	TABLET	70	1500mg/day	No	0.10
			Gliclazide	80 mg	TABLET	70	200mg/day		
5	Metformin+Pioglitazone		Metformin	500 mg	TABLET	70	1500mg/day	Yes	0.11
			Pioglitazone	30 mg	TABLET	70	15mg/day		
			Metformin	500 mg	TABLET	70	1500mg/day	No	0.19
			Pioglitazone	30 mg	TABLET	70	75mg/day		

<b>Triple therapy</b>	1	Metformin+ Pioglitazone+ Glibenclamde	Metformin	500 mg	TABLET	70	1500mg/day	Yes	0.12
			Pioglitazone	30 mg	TABLET	70	15mg/day		
			Glibenclamide	5 mg	TABLET	70	2.5mg/day		
			Metformin	500 mg	TABLET	70	1500mg/day	No	
			Pioglitazone	30 mg	TABLET	70	75mg/day		
			Glibenclamide	5 mg	TABLET	70	12.5mg/day		
	2	Metformin+ Pioglitazone+ Gliclazide	Metformin	500 mg	TABLET	70	1500mg/day	Yes	0.13
			Pioglitazone	30 mg	TABLET	70	15mg/day		
			Gliclazide	80 mg	TABLET	70	40mg/day		
			Metformin	500 mg	TABLET	70	1500mg/day	No	
			Pioglitazone	30 mg	TABLET	70	75mg/day		
			Gliclazide	80 mg	TABLET	70	200mg/day		
	3	Metformin+ Pioglitazone+ Acarbose	Metformin	500 mg	TABLET	70	1500mg/day	Yes	0.14
			Pioglitazone	30 mg	TABLET	70	15mg/day		
			Acarbose	50 mg	TABLET	70	25mg/day		
Metformin			500 mg	TABLET	70	1500mg/day	NO		
Pioglitazone			30 mg	TABLET	70	75mg/day			

			Acarbose	50 mg	TABLET	70	50mg/day			
	4	Metformin+ basal Insulin**	Metformin+ Insulin isophane	500 mg	Metformin	70	1500mg/day	Yes	0.24	
				100 IU/ml	Insulin isophane	90	0.4IU/kg/day			
			Metformin+ Insulin glargine	500 mg	Metformin	70	1500mg/day	Yes	0.78	
				100 IU/ml	Insulin glargine	90	0.4IU/kg/day			
			Metformin+Insulin detemir	500 mg	Metformin	70	1500mg/day	Yes	2.65	
				100 IU/ml	Insulin detemir	70	0.4IU/kg/day			
<b>Insulin Therapy</b>	5	50% Basal+ 50% Rapid or Short -Acting	NPH+Regular	100 IU/ml	Insulin isophane	90	0.5IU/kg/day	Lifetime	0.34	
				100 IU/ml	Regular	95	0.5IU/kg/day			
			NPH+ Aspart	100 IU/ml	Insulin isophane	90	0.5IU/kg/day	Lifetime	0.53	
				100 IU/ml	Aspart	95	0.5IU/kg/day			
				NPH+ Glulisine	100 IU/ml	Insulin isophane	90	0.5IU/kg/day	Lifetime	1.89

			100 IU/ml	Glulisine	70	0.5IU/kg/day		
		Glargine+ Regular	100 IU/ml	Glargine	90	0.5IU/kg/day	Lifetime	0.88
			100 IU/ml	Regular	95	0.5IU/kg/day		
		Glargine+ Aspart	100 IU/ml	Glargine	90	0.5IU/kg/day	Lifetime	1.07
			100 IU/ml	Aspart	95	0.5IU/kg/day		
		Glargine+ Glulisine	100 IU/ml	Glargine	90	0.5IU/kg/day	Lifetime	2.43
			100 IU/ml	Glulisine	70	0.5IU/kg/day		

Note: all calculation were performed for patient of 75 kg.

\*\* If not responded, shift to insulin therapy. See this part.