

Supplement Table 1: ADA, NICE, and Dutch Guideline recommendations. LLM = lipid lowering medication, AHM = antihypertensive medication, ASCVD = atherosclerotic cardiovascular disease, TC= total cholesterol, ACR = albumin creatinine ratio, eGFR= estimated GFR, SCORE = systematic coronary risk evaluation (low risk chart)

	Lipid lowering medication	Blood pressure medication
ADA Guidelines [4]	<p><40 years with no ASCVD* – <u>None</u></p> <p><40 years with ASCVD – <u>High intensity LLM</u></p> <p>≥40 years with no ASCVD** – <u>Moderate intensity LLM</u></p> <p>≥40 years with ASCVD – <u>High intensity LLM</u></p> <p>*with risk factors, consider moderate statin therapy</p> <p>**with risk factors, consider high intensity statin therapy</p> <p>Aim for LDL <1.8 mmol/l for high intensity therapy, and <2.6 mmol/l for moderate intensity therapy</p>	<p>Recommend the use of antihypertensive medication in individuals with confirmed hypertension, blood pressure ≥140/90 mmHg</p> <p>Aim for a blood pressure <140/90 mmHg</p>
NICE guidelines NICE guideline lipid [13] & hypertension [15]	<p><u>Consider LLM</u> treatment for the primary prevention of CVD</p> <p><u>Offer LLM</u> treatment for the primary prevention of CVD to adults with Type 1 diabetes who:</p> <ul style="list-style-type: none"> • Are older than 40 years or • Have had diabetes for more than 10 years or • Have established nephropathy or • Have other CVD risk factors <p><u>Start LLM</u> treatment in people with CVD</p> <p>Aim for 40% reduction in non-HDL</p>	<p>Offer antihypertensive drug treatment to people aged under 80 years with stage 1 (clinical blood pressure >140/90, and subsequent BP >135/85) hypertension who have one or more of the following</p> <ul style="list-style-type: none"> • Target organ damage • Established CVD • Renal disease • Diabetes • A 10-year CVD risk ≥20% <p>Offer antihypertensive drug treatment to people of any age with stage 2 hypertension (BP ≥160/100mmHg).</p> <p>Aim for a target clinic blood pressure - - below 140/90 mmHg in people aged under 80 years with treated hypertension - below 150/90 mmHg in people aged above 80 years with treated hypertension</p>
Dutch guidelines [12]	<p><u>Very high risk</u> (LLM is recommended): Individuals with</p> <ul style="list-style-type: none"> • CVD, • diabetes mellitus with end-organ damage, or important risk factors such as smoking, hypercholesterolaemia or blood pressure ≥180mmHg • Severe renal disease: eGFR <29 mL/min/1.73 m², or eGFR 30-44 mL/min/1.73 m² with ACR 3-30 mg/mmol, or eGFR 45-59 mL/min/1.73 m² with ACR >30 mg/mmol. • SCORE ≥ 10% <p><u>High risk</u> (consider LLM): Individuals with</p> <ul style="list-style-type: none"> • A single high-risk factor, such as a total cholesterol > 8mmol/l or blood pressure ≥180mmHg. • Most other individuals with diabetes mellitus (except for young individuals with type 1 diabetes mellitus without classical risk factors) 	<p>Start antihypertensive medication for those with systolic >180 regardless of risk level.</p> <p>When blood pressure is ≥140/90mmHg:</p> <ul style="list-style-type: none"> • Those with very high risk are recommended to start antihypertensive medication. • Consider antihypertensive medication in those with high risk or low to medium risk. <p>Aim for a blood pressure <140/90 mmHg</p>

	<ul style="list-style-type: none">• Chronic Renal disease: eGFR 30-44 mL/min/1.73 m² with ACR <3 mg/mmol, or eGFR 45-59 mL/min/1.73 m² with ACR 3-30 mg/mmol, or eGFR ≥60 mL/min/1.73 m² with ACR >30 mg/mmol.• SCORE ≥ 5% and < 10% <p><u>Low to medium risk</u> (LLM rarely necessary):</p> <ul style="list-style-type: none">• SCORE <5% <p>Aim for LDL < 1.8mmol/l in patients with CVD ≤ 70 years, and LDL < 2.6 mmol/l with</p> <ul style="list-style-type: none">• 10-year risk SCORE ≥5%,• Patients with diabetes mellitus• Renal disease,• Single increased risk factor, TC > 8mmol/l or blood pressure ≥ 180mmHg	
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Supplement Table 2: Population characteristics of excluded individuals.

Comparison are between those excluded and included in the study, *0.05, **0.01, ***<.001.

Excluded	N = 432
Age, years	26.4 [21.3, 43.2]
Sex, n % female	232 (53.7)
Ethnicity, n % Western European	397 (91.9) *
Diabetes duration, years	14.5 [9.0, 21.8] **
BMI, kg/m ²	25.5 ± 4.8
Smoking, n % yes	
Current smoker count, n %	56 (16.9) *
Former smoker count, n %	21 (6.3)
Never smoker count, n %	255 (76.8)
HbA1c, mmol/mol	62 ± 15
HbA1c, %	7.8 ± 1.4
Creatinine, umol/L	75 [64, 86] ***
eGFR, ml/min/kg ²	81 [70, 104] ***
Retinopathy, n (%)	68 (15.78)
Neuropathy, n (%)	52 (12.06) *
Nephropathy, n (%)	32 (7.44)
Coronary Artery Disease, n (%)	14 (3.25)
Cerebrovascular Disease, n (%)	8 (1.86)
Peripheral arterial Disease, n (%)	12 (2.78)
Diabetic foot abnormalities, n (%)	15 (3.50)
Cardiovascular Disease, n (%)	28 (6.50)
Cholesterol lowering medication, n (%)	82 (18.98)
Antihypertensive medication, n (%)	66 (15.28)
Anti thrombotic medication, n (%)	37 (8.56) *

Supplement Table 3: Guideline recommendations for lipid management and use of lipid lowering medication

	No lipid lowering medication (n=1497)	Lipid lowering medication (n=358)	Total Count	Percent per indication	
ADA recommendations for lipid management					
No LLM, n (%)	30 (100.0)	0 (0.0)	30	1.6%	
Consider Moderate LLM, n (%)	1199 (92.3)	100 (7.7)	1299	70.1%	
Lipid lowering medication, n (%)	267 (50.1)	258 (49.9)	525	28.3%	
Moderate LLM	252 (57.0)	190 (43.0)	442	23.8%	
Consider High, n (%)	3 (100.0)	0 (0.0)	3	0.2%	
intensity LLM, n (%)					
High intensity LLM, n (%)	12 (15.0)	68 (85.0)	80	43.1%	
	1496	358	1854		
Dutch guidelines recommendations for lipid management					
No LLM, n (%)	1001 (92.3)	84 (7.7)	1085	58.5%	
Consider LLM, n (%)	261 (77.7)	75 (23.3)	336	18.1%	
Start LLM, n (%)	235 (54.1)	199 (45.9)	434	23.4%	
	1497	358	1855		
NICE guideline recommendations for lipid management					
Consider LLM, n (%)	258 (100.0)	0 (0.0)	258	13.9%	
Offer LLM, n (%)	1227 (80.9)	290 (19.1)	1517	81.8%	
Start LLM, n (%)	12 (15.0)	68 (85.0)	80	4.3%	
	1497	358	1855		

Supplement Table 4: ADA guideline recommendations for lipid management and use of lipid lowering medication per age group.

	No LLM	Consider moderate LLM	Moderate LLM	Consider high intensity LLM	High intensity LLM
18-25, n (%)	0/14 (0)	44/753 (5.84)	-	-	0/1
25-30, n (%)	0/9 (0)	29/329 (8.81)	-	-	1/1 (100)
30-40, n (%)	0/7 (0)	27/217 (12.4)	-	-	2/3 (66.7)
40-50, n (%)	-	-	43/162 (26.5)	0	11/11 (100)
50-60, n (%)	-	-	77/169 (45.6)	0/1 (0)	16/20 (80%)
60-70, n (%)	-	-	53/82 (64.6)	0/2 (0)	28/31 (90.3)
70+, n (%)	-	-	17/29 (58.6)	0	10/13 (76.9)

Supplement Table 5: Dutch guideline recommendations for lipid management and use of lipid lowering medication per age group.

	No LLM	Consider LLM	Start LLM
18-25, n (%)	23/557 (4.13)	14/153 (9.15)	7/39 (17.9)
25-30, n (%)	9/218 (4.13)	13/69 (18.8)	8/52 (15.4)
30-40, n (%)	8/119 (6.72)	7/36 (19.4)	14/72 (19.4)
40-50, n (%)	13/86 (15.1)	16/34 (47.1)	25/53 (47.2)
50-60, n (%)	20/68 (29.4)	15/28 (53.6)	58/94 (61.7)
60-70, n (%)	7/9 (77.8)	10/15 (66.7)	64/91 (70.3)
70+, n (%)	4/8 (50.0)	0/1 (0)	23/33 (69.7)

Supplement Table 6: NICE guideline recommendations for lipid management and use of lipid lowering medication per age group.

	Consider LLM	Offer LLM	Start LLM
18-25, n (%)	0/184 (0)	44/584 (7.53)	0/1 (0)
25-30, n (%)	0/44 (0)	29/294 (9.86)	1/1 (100)
30-40, n (%)	0/30 (0)	27/194 (13.9)	2/3 (66.7)
40-50, n (%)	-	43/162 (26.5)	11/11 (100)
50-60, n (%)	-	77/170 (45.3)	16/20 (80.0)
60-70, n (%)	-	53/84 (63.1)	28/31 (90.3)
70+, n (%)	-	17/29 (58.6)	10/13 (76.9)

Supplement Table 7: Guideline recommendations for blood pressure management and use of antihypertensive medication

	No antihypertensive medication (N = 1537)	Hypertensive medication (N = 318)	Total Count	Percent per indication
ADA recommendations for hypertension management				
No antihypertensive medication, n (%)	1130 (100.0)	0 (0.0)	1130	65.1%
Antihypertensive medication, n (%)	289 (47.6)	318 (52.3)	607	34.9%
	1419	318	1737	
Dutch guidelines recommendations for hypertension management				
No antihypertensive medication, n (%)	1130 (100.0)	0 (0.0)	1130	65.1%
Consider	216 (69.7)	94 (30.3)	310	17.8%
Antihypertensive medication, n (%)				
Start antihypertensive medication, n (%)	73 (24.6)	224 (75.4)	297	17.1%
	1419	318	1737	
NICE guideline recommendations for hypertension management				
No antihypertensive medication, n (%)	1131 (100.0)	0 (0.0)	1131	65.1%
Antihypertensive medication, n (%)	289 (47.6)	318 (52.4)	607	34.9%
	1420	318	1738	

Supplement Table 8: Guideline recommendations for blood pressure management and use of antihypertensive medication per age group.

	ADA	Dutch		NICE
	<i>AHM</i>	<i>Offer AHM</i>	<i>AHM</i>	<i>AHM</i>
18-25, n (%)	15/128 (11.7)	6/114 (5.26)	9/14 (64.3)	15/128 (11.7)
25-30, n (%)	21/72 (29.1)	13/55 (2.36)	8/17 (47.1)	21/72 (29.2)
30-40, n (%)	34/70 (45.9)	12/36 (33.3)	22/34 (64.7)	34/70 (48.6)
40-50, n (%)	46/74 (62.2)	20/37 (54.1)	26/37 (70.3)	46/74 (62.2)
50-60, n (%)	97/131 (74.0)	30/47 (63.8)	67/84 (79.8)	97/131 (74.0)
60-70, n (%)	79/96 (82.3)	11/14 (78.6)	68/82 (82.9)	79/96 (82.3)
70+, n (%)	26/36 (72.2)	2/7 (28.6)	24/29 (82.8)	26/36 (72.2)

Supplement Table 9: Achieving treatment targets for pharmacological lipid and blood pressure management

	N	% medication users achieving target
Meets statin target, no CVD	290	50.3% (44.6% - 56.1%)
Meets statin target, CVD	68	30.9% (20.0% - 41.8%)
Meets BP target	302	46.4% (40.8% - 52.0%)