

Key facts about residual vascular risk

Macrovascular Residual Risk

- 77 percent of the risk of heart attacks are still not prevented in patients treated by statin therapy, due to the residual vascular risk^{1,2}
- 23 million years of life, worldwide, are lost as a result of disability due to complications associated with diabetes³
- The World Health Organization estimates that over a 10-year period (2006-2015), China will lose \$558 billion in national income due to heart disease, stroke and diabetes alone⁴

Diabetes and Microvascular Residual Risk

- Diabetes is ranked among the leading causes of blindness, renal failure and lower-limb amputation⁵
- Diabetic eye or kidney disease, or nerve damage leading to limb amputation develops and/or progresses in up to 50 percent of patients despite intensive risk factor management⁶
- Developing countries will have the largest increase in diabetes prevalence and are more likely to be harder hit by the burden of residual vascular risk^{7,3}

Diabetes worldwide

- Diabetes currently affects 246 million people and this is estimated to increase to 380 million by 2025⁷
- Each year a further 7 million people develop diabetes, mainly type 2 diabetes (over 90 percent of cases)⁷
- Diabetes is the fourth leading cause of global death, responsible for 3.8 million deaths in 2007⁷
- Deaths from diabetes translates into more than 25 million years of life lost each year

Atherogenic Dyslipidemia and Residual Vascular Risk

- Low HDL-C levels and high triglyceride levels are important contributors to residual vascular risk⁸
- Up to 50 percent of treated adults with CVD, diabetes or the metabolic syndrome have high levels of triglycerides and/or low HDL-C levels⁹

Residual Vascular Risk beyond blood pressure and glycemic control

- Among treated patients with target LDL-C levels (<70 mg/dL), those with either low HDL-C or high triglycerides remain at high residual vascular risk, up to 40 percent higher than in those with recommended levels^{10,11}
- In the Action in Diabetes and Vascular Disease (ADVANCE) study, aggressive blood pressure reduction did not significantly reduce the risk of microvascular events (relative reduction by 9 percent)¹²

- Intensive glycaemic control in the ADVANCE study reduced microvascular events (-14 percent, p=0.01), mainly due to reduction in nephropathy (-21 percent, p=0.006)¹³
- In the ADVANCE study nearly one in five patients (19.6 percent) developed microalbuminuria (a marker of diabetic kidney disease) over the mean 4.3 years follow-up. There was also no significant impact on new or worsening retinopathy¹⁵

References

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