

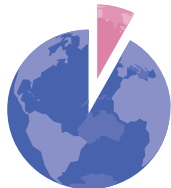
# Stroke: Impact, Types and Risk Factors

Every year,  
**15 million** people worldwide suffer a stroke<sup>1</sup>

Stroke accounts for  
**6.7 million** deaths annually worldwide<sup>2</sup>



= Almost **12%** of all deaths annually worldwide<sup>2</sup>



Those who survive stroke,  
**5 million** are left disabled every year<sup>3</sup>



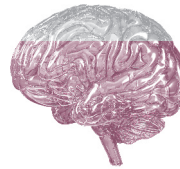
### Potential impact of stroke:

- |   |   |
|---|---|
| <b>Stroke survivor<sup>4</sup></b>  | <b>Family members<sup>5,6</sup></b>   |
| <ul style="list-style-type: none"> <li>Severely restricted movement</li> <li>Paralysis</li> <li>Loss of speech (may be permanent)</li> <li>Loss of vision (may be permanent)</li> </ul> | <ul style="list-style-type: none"> <li>Depression</li> <li>Loss of independence (due to permanent physical and cognitive disabilities of stroke survivors)</li> </ul> |

### Ischaemic stroke

**85%**

of all strokes are caused by blood clots<sup>8</sup>



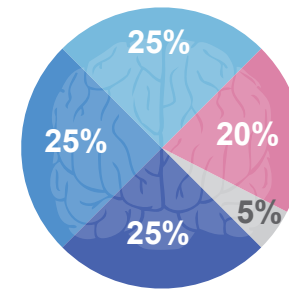
### Haemorrhagic stroke

**15%**

of all strokes are caused by bleeding in the brain<sup>8</sup>

### Types of ischaemic stroke<sup>9</sup>:

- Large-artery atherosclerosis
- Embolic stroke of undetermined source (ESUS)
- Small-artery disease
- Recognised cardiogenic embolism
- Unusual causes



### Atrial fibrillation (AF):

AF, often the cause of recognised cardio embolic stroke, is an irregular heartbeat that causes turbulent blood flow which can lead to the blood clotting. These blood clots can travel to the brain and trigger a major and often fatal stroke<sup>10,11</sup>. AF has no geographic, gender or socio-economic boundaries and is responsible for approximately 20% of all strokes caused by blood clots<sup>11</sup>



### Risk factors for ischaemic stroke can include<sup>12</sup>:



Being overweight/obesity



Lack of exercise/movement



Heavy drinking



High blood pressure



Drug use



Smoking



High cholesterol



Cardiovascular disease



Sleep apnoea



Diabetes



Total annual cost of stroke in the EU is estimated at

**€38 billion<sup>7</sup>**



It is important for doctors and patients to discuss all available treatment options to ensure the patient receives the best protection against stroke for their lifestyle



**References:** 1) World Heart Federation Stroke Factsheet. Available at: <http://www.world-heart-federation.org/cardiovascular-health/stroke/>. Accessed January 2015. 2) World Health Organisation (WHO). The top 10 causes of death. Available at: <http://www.who.int/mediacentre/factsheets/fs310/en/index2.html>. Accessed January 2015. 3) Mackay, J, Mensah, G. Global burden of stroke. The Atlas of Heart Disease and Stroke. United Kingdom. World Health Organization 2004. Available at [http://www.who.int/cardiovascular\\_diseases/resources/atlas/en/](http://www.who.int/cardiovascular_diseases/resources/atlas/en/). Accessed January 2015. 4) News Medical. What is a stroke? Available at <http://www.news-medical.net/health/What-is-a-Stroke.aspx>. Accessed January 2015. 5) Grant JS, et al. Caregiving problems and feelings experienced by family caregivers of stroke survivors the first month after discharge. Int J Rehabil Res 2004;27:105-11. 6) Wolfe C, Rudd A. The Burden of Stroke White Paper: Raising awareness of the global toll of stroke-related disability and death. 2007. <http://www.safestroke.org/Portals/10/FINAL%20Burden%20of%20Stroke.pdf>. Accessed January 2015. 7) European Heart Network and European Society of Cardiology, September 2012. European Cardiovascular Disease Statistics 2012 Edition. Available at: <http://www.escardio.org/about/documents/eu-cardiovascular-disease-statistics-2012.pdf>. Accessed January 2015. 8) Intercollegiate Stroke Working Party. National clinical guideline for stroke, 4th edition. London: Royal College of Physicians 2012 P4 9) Hart RG, Diener HC, Coutts SB, et al. Embolic strokes of undetermined source: the case for a new clinical construct. Lancet Neurol 2014; 13: 429-38. 10) NHS Choices. Atrial fibrillation. Available at <http://www.nhs.uk/Conditions/Atrial-fibrillation/Pages/Introduction.aspx>. Accessed January 2015. 11) Atrial Fibrillation Society. The AF Report Atrial Fibrillation: Preventing a Stroke Crisis. Available at <http://www.preventaf-strokecrisis.org/files/files/The%20AF%20Report%2014%20April%202012.pdf>. Accessed January 2015. 12) Mayo Clinic. Stroke Risk Factors. Available at <http://www.mayoclinic.org/diseases-conditions/stroke/basics/risk-factors/con-20042884>, Accessed January 2015.