

**3<sup>rd</sup> leading cause** of death and disability worldwide<sup>1</sup>

**~12 million** people experience their first stroke each year<sup>1</sup>

**1 in 4 people** will experience a stroke during their lifetime<sup>1</sup>

**World** 70% ischemic and 30% hemorrhagic<sup>1</sup>, **US** 82% ischemic and 18% hemorrhagic<sup>2</sup>

**18%** Risk of recurrence is **high** with IS<sup>3</sup>

### Current Therapies for Secondary Ischemic Stroke Prevention<sup>3,4</sup>

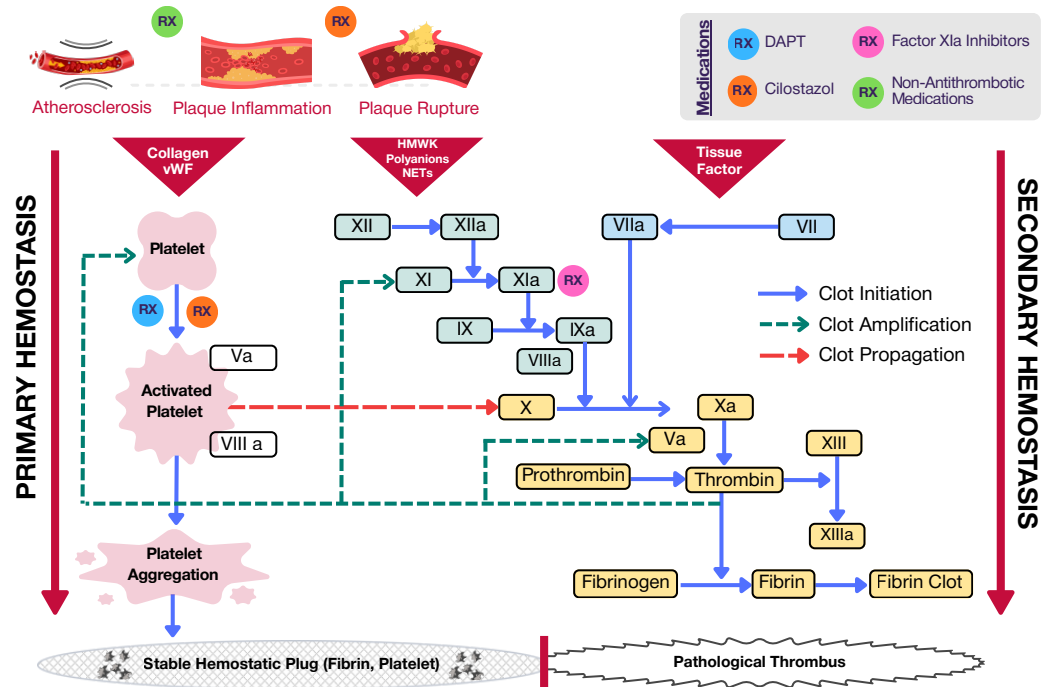
40% CARDIOEMBOLIC	<b>Cardioembolic - 25%</b> <b>Half of all cardioembolic strokes are linked to AF<sup>5</sup></b> AF: DOAC preferred If moderate to severe mitral stenosis/rheumatic mitral disease, VKA <b>Mechanical Valve:</b> VKA <b>LV Thrombus:</b> VKA or DOAC <sup>3</sup> <b>1-Year Recurrence Risk<sup>7</sup>:</b> AF: 0.7-2.3% AF with IS on OAC: 7.2%
	<b>Cryptogenic - 30%</b> <b>One-third of all cryptogenic strokes are linked to AF<sup>6</sup></b> 50% non-embolic, 50% ESUS <sup>3</sup> ESUS: SAPT (ASA preferred) DOAC not recommended <b>1-Year Recurrence Risk<sup>8</sup>:</b> 3-6%
60% NON-CARDIOEMBOLIC	<b>Large Artery Atherosclerosis<sup>3</sup> - 20%</b> DAPT (up to 90 days) or SAPT <b>1-Year Recurrence Risk:</b> ≥70% artery stenosis: 18%
	<b>Small Vessel Disease<sup>3</sup> - 20%</b> DAPT (21-90 days) or SAPT <b>1-Year Recurrence Risk:</b> 4-11%
	<b>Other Determined Cause<sup>6</sup> - 5%</b> <b>Predisposing Conditions</b> APS, cancer associated, genetic disorders, iatrogenic, illicit drug use, nonatherosclerotic vascular lesions (vasculitis, webs, dissections)

**In conjunction with appropriate antithrombotic therapy, vascular risk factors—including hypertension, hyperlipidemia, diabetes mellitus, and smoking—must be managed.<sup>3</sup>**

### Future Directions In Non-cardioembolic Secondary Stroke Prevention<sup>4,10</sup>

- Platelet activation and clot initiation** leads to primary and secondary hemostasis.
- Clot amplification** is initiated by the thrombin generated from step 1 and further activates XI and platelets, promoting **clot propagation**. If dysregulated, this can lead to pathological thrombus formation.

#### Endothelium Injury



### Opportunities to Improve Secondary Stroke Prevention

Medications*	RX DAPT <sup>11-14</sup>	RX Cilostazol <sup>15</sup>	RX Non-Antithrombotic Medications <sup>16,17</sup>	RX Factor XIa Inhibitors <sup>18,19</sup>
*DOAC not recommended				
<b>Gaps in Therapy</b>	~25-50% of patients indicated for DAPT in SSP do not receive it	Despite guideline recommended SAPT/DAPT recurrence up to 18%	SSP is multifactorial and cardiometabolic risk factors contribute	Despite guideline recommended SAPT/DAPT recurrence up to 18%
<b>Benefit</b>	NNT = 28-91 to reduce 1 stroke/TIA	NNT ~38 for selected patients placed on DAPT including cilostazol	GLP-1 receptor agonists and novel lipid lowering agents show substantial secondary stroke reduction	FXIa inhibitors added to SAPT/DAPT after non-cardioembolic stroke may provide additional SS reduction

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