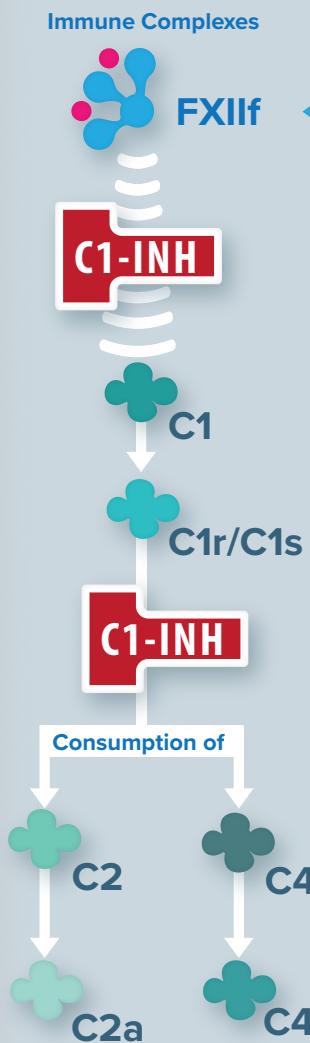


## COMPLEMENT SYSTEM<sup>1,4-6,10,11</sup>

### Classical Pathway

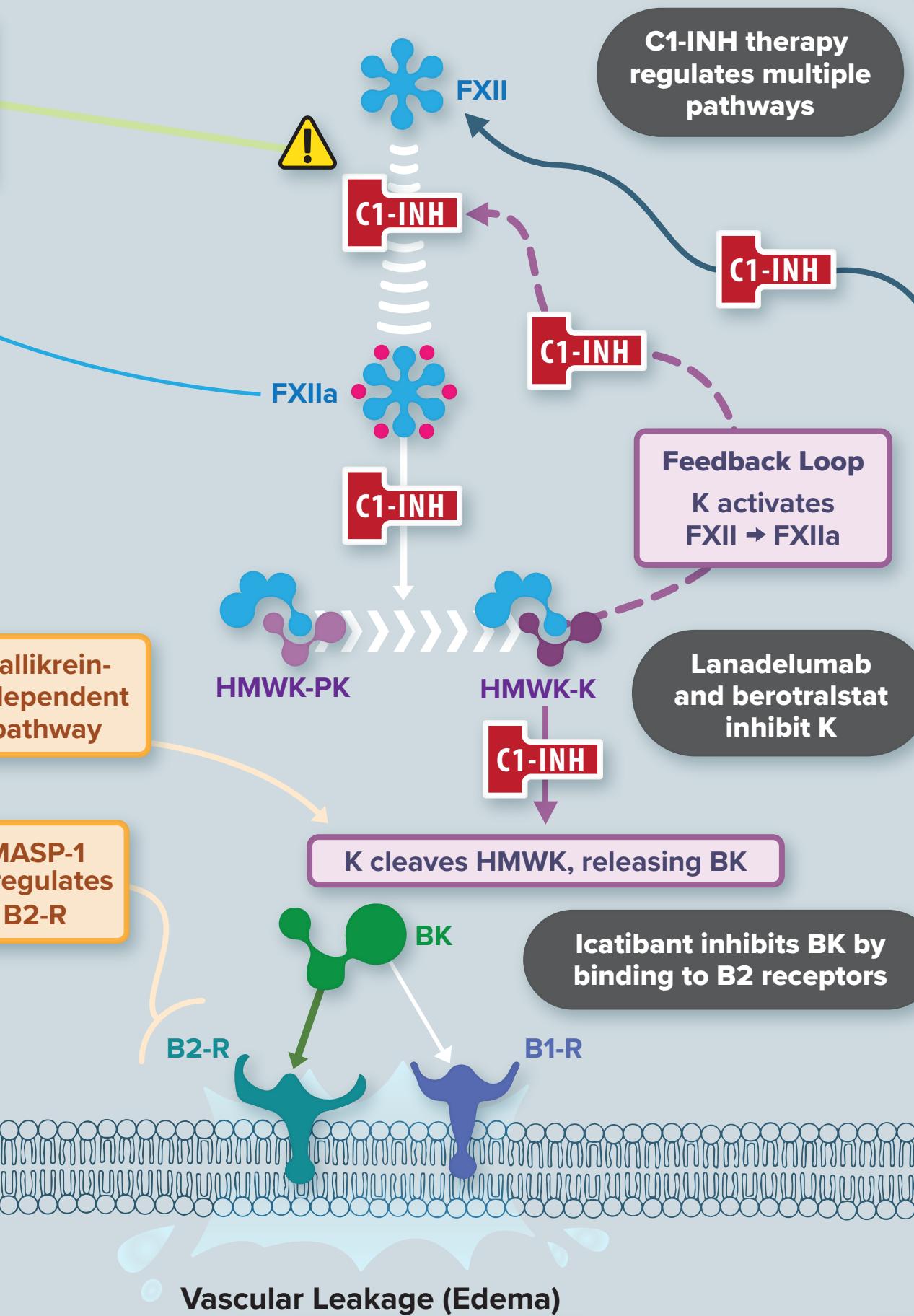


### Lectin Pathway

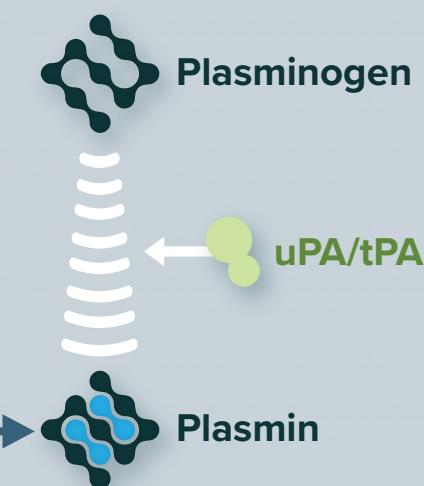


**Trigger(s)**  
 • Trauma  
 • Stress  
 • Infection  
 • Unknown

## CONTACT ACTIVATION SYSTEM<sup>1,6,12-14</sup>



## FIBRINOLYSIS SYSTEM<sup>7,15,16</sup>



### ABBREVIATIONS

BK	Bradykinin
C1-INH	C1 inhibitor
C#	Complement component
FXII	Coagulation factor XII
FXIIa	Activated FXII
FXIIIf	Fragment of FXIIa
HAE	Hereditary angioedema
HMWK	High-molecular-weight kininogen
K	Kallikrein
MASP	MBL-associated serine protease
MBL	Mannose-binding lectin
PK	Prekallikrein
tPA	Tissue plasminogen activator
uPA	Urokinase plasminogen activator

# The Importance of C1-INH for HAE<sup>1-9</sup>

Created in partnership  
with Dr. Allen Kaplan

## Complement System

- Participates in the elimination of invading microorganisms<sup>17</sup>
- Low C1-INH levels fail to block MASP-1 from cleaving HMWK, which may augment bradykinin production<sup>18</sup>
- Low levels of C1-INH lead to activation and consumption of C4 and C2 during acute HAE attacks<sup>19</sup>

## Contact Activation System

- Represents a group of plasma proteins that promote inflammation upon activation<sup>20</sup>
- Low C1-INH levels fail to block FXIIa and Kallikrein, leading to an increase in bradykinin production<sup>19</sup>

## Fibrinolysis System

- Regulates the dissolution of clots as wounds heal by degrading fibrin, the netting that clots blood<sup>21</sup>
- Plasmin activates FXII to FXIIa (and FXIIf)<sup>7</sup>

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