

# Innovative Medicines: How the 'Sticker Price' is Determined

*NUGEVITY* : A Hypothetical Example

# Consider Nugevity

## *Hypothetical new cancer treatment*

- Treats nastanoma – hypothetical cancer with limited treatment options
  - <1,000 working-age Canadian patients per year (i.e., small patient population)
- First-line therapy
- Patients treated until the disease progresses
  - Average = 18 cycles
- Oral tablet replacing Cytokil, a hypothetical IV chemo, the Canadian standard of care (SOC)

**Priced at \$ 5,000 per cycle (month)  
in Canada**

**How was the Nugevity price in  
Canada determined?**

# Nugevity Canadian Price – Multiple Factors



# Nugevity Pricing Strategy Development

## Inputs

## Considerations

Nugevity Value Proposition



Does it warrant a 'premium' price vs. currently available treatments?

PMPRB Maximum Allowable Price (MAPP)



Should Nugevity be priced at or below the PMPRB ceiling?

Pricing & Reimbursement (P&R) Landscape



What is the probability of a positive HTA economic review?

Global Pricing Strategy



Will the Canadian price be within the global pricing corridor?

Stakeholder input/feedback



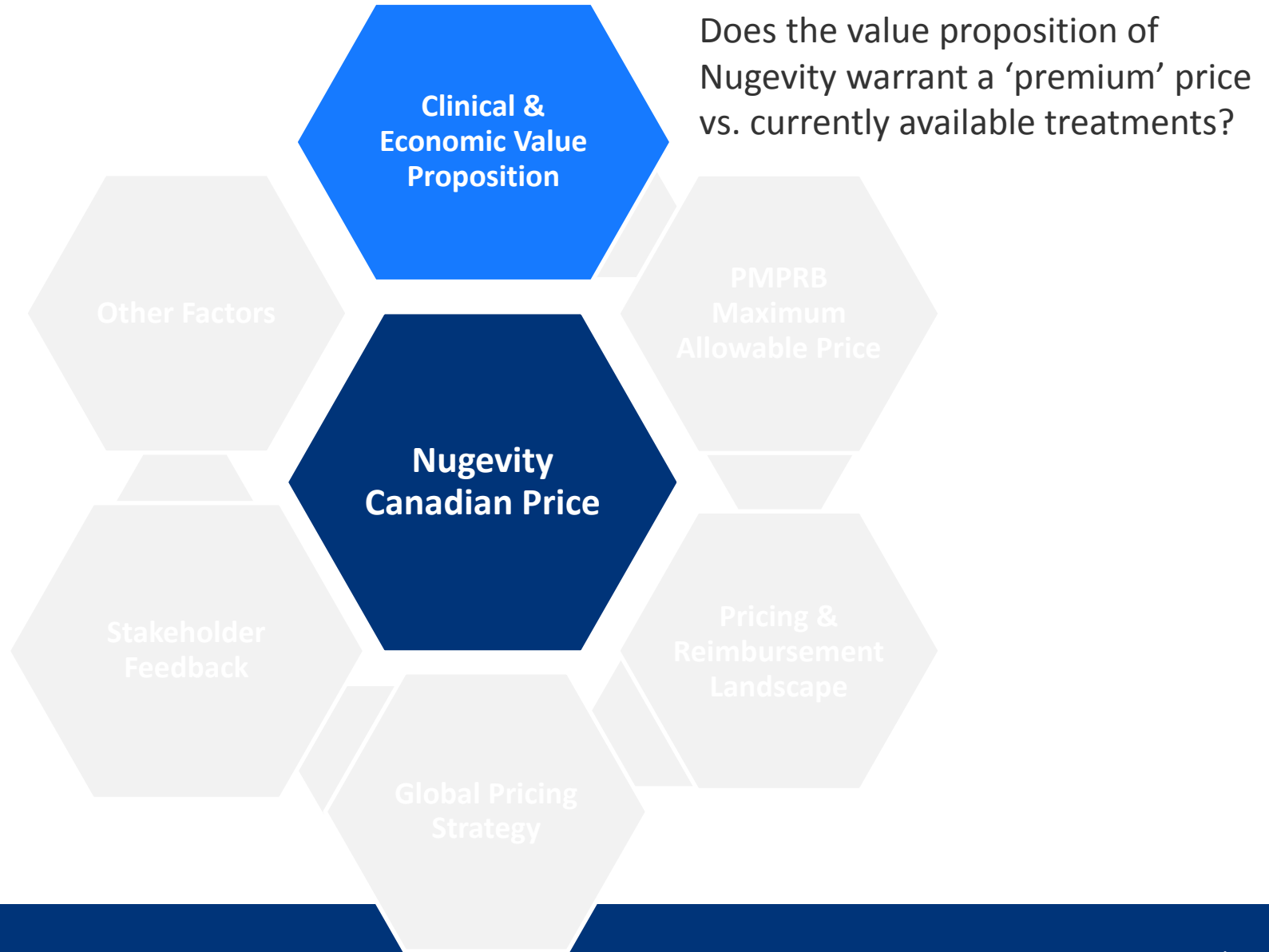
How do stakeholders react to the proposed price?

Other Factors



How do we strike the right balance between affordability and risk?

# Nugevity Canadian Price – Multiple Factors



## Nugevity – Strong Clinical Profile

Attribute	Nugevity	Cytokil
Administration	oral	IV
Efficacy		
Overall Survival	+4 mos (↑ 50%)	
Complete Response	+25%	
Progression-Free Survival	>2 yrs	15 mos
Side Effects		
Fatigue	10%	30%
Hair Loss	20%	35%
Nausea	70%	95%

## Nugevity – Strong Clinical Profile

Attribute	Nugevity	Cytokil
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Efficacy		
Overall Survival	✓	
Complete Response	✓	
Progression-Free Survival	✓	
Side Effects		
Fatigue	✓	
Hair Loss	✓	
Nausea	✓	



## Nugevity – High-Value vs. Cytokil

Patient Benefits	N	C	Health System Benefits	N	C
Progression-free	↑		Physician visits	↓	
Survival	↑		“Chair” time	↓	
Response rate	↑		Nursing time	↓	
Side effect frequency	↓		Side effect medicines	↓	
Side effect severity	↓		Emergency room visits	↓	
Lost time from work	↓		Hospitalizations	↓	
Quality of life	↑		Hospital days	↓	

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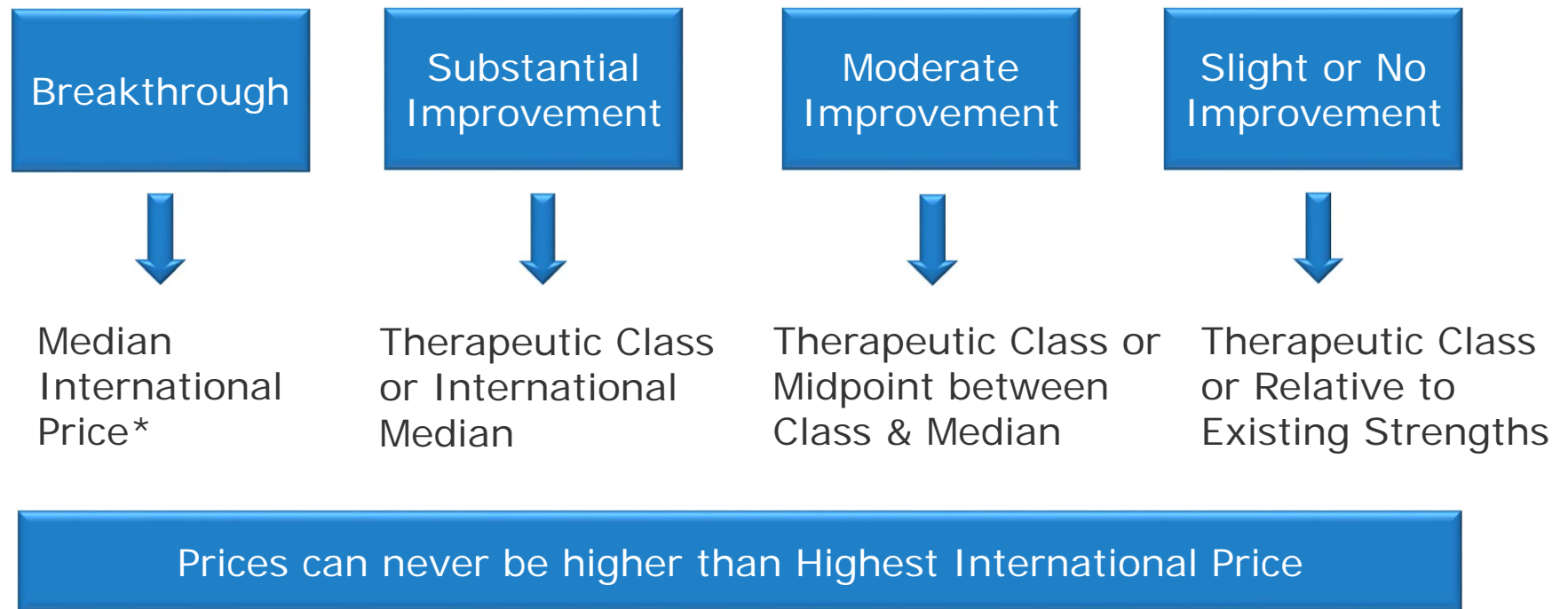


Should the price be at or below the PMPRB ceiling price?

**How will PMPRB view Nugevity?**

# Current PMPRB Process: Scientific Review and a Price Test

*3 Tests: Highest and Median International Price, Therapeutic Class*



\*France, Germany, Italy, Sweden Switzerland, UK, US

# Nugevity Scientific Review Expectation

<b>Primary indication:</b>	First-line therapy for nasutanoma (the only approved Nugevity indication)
<b>Comparable medicines:</b>	Cytokil (the only existing medicine indicated or used for first-line treatment of nasutanoma)
<b>Comparable dosage:</b>	Nugevity: 1x50mg tablet per day for 28 days (total = 1,400mg per cycle)  Cytokil: 0.5mg/kg for 15 days (total = 525mg per 28-day cycle based on 70kg patient)
<b>Level of therapeutic improvement:</b>	Substantial (expected) <ul style="list-style-type: none"><li>• Based on primary factors (efficacy); <math>\geq 25\%</math> relative improvement in survival vs. the comparator</li></ul>

# Nugevity Price Test Expectation

- Substantial Improvement Price Test:
  - Higher of the Canadian Therapeutic Class Comparison (TCC) or the Median International Price Comparison (MIPC)
- Therapeutic Class Comparison (TCC) Calculation

Cytokil Canadian prices/mg					
AQPP	OPDP	RAMO	IMS CD&H	McKesson	PPS
\$ 5.00	\$ 6.50	\$ 5.00	\$ 7.82	\$ 6.17	n/a

- TCC Calculation = price x total dose = \$ 5 x 525 mg = \$ 2,625/28 days

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- MIPC (estimated) = C\$ 5,500/28 days
  - Highest international price = \$ 7,500/28 days



# Nugevity Price Test Expectation

- Substantial Improvement Price Test:
  - Higher of the Canadian Therapeutic Class Comparison (TCC) or the Median International Price Comparison (MIPC)

**Nugevity PMPRB Ceiling Price = \$ 196.43/50 mg tablet  
(= \$5,500/cycle)  
(based on Median International Price Comparison test)**

# Nugevity Canadian Price – Multiple Factors



# Current Pricing & Reimbursement Landscape

- Considerations:
  - Who will be the primary payer?
  - What treatments are currently reimbursed and what will the new medicine displace?
  - How does the total cost (drug and non-drug) of the new medicine compare with existing treatments?
- Nugevity will displace Cytokil → first-line therapy for nasalanoma
- Cytokil fully reimbursed by all Canadian cancer agencies / provincial drug plans, with criteria:
  - For first-line treatment of biopsy-confirmed nasalanoma
  - For  $\leq 6$  cycles: Treatment days 1 – 5 per week for 3 weeks, with 1 week off
- Public (transparent) price of Cytokil = \$ 5/mg
  - \$ 2,625/28-day cycle x 6 cycles/patient (average) = \$ 15,570/patient
  - Non-drug healthcare costs (side effect management, administration costs) ~ \$ 25,000/patient (average)

# Nugevity Canadian Price – Multiple Factors



Will the Canadian price be within the global pricing corridor?

# Global Pricing Policy Guides Local Decisions

- Global processes are similar to local ones
- Important differences:
  - Global research includes many countries, large samples
  - Local regulatory nuances are often not considered
  - Global pricing policy: Multiple pricing tiers based on 'ability to pay' (countries with similar ability to pay in the same tier)

## **Nugevity Global Pricing Strategy for Tier 1 countries:**

**Global Target List Price (range): \$ 5,500-\$7,500/cycle**

# Nugevity Canadian Price – Multiple Factors

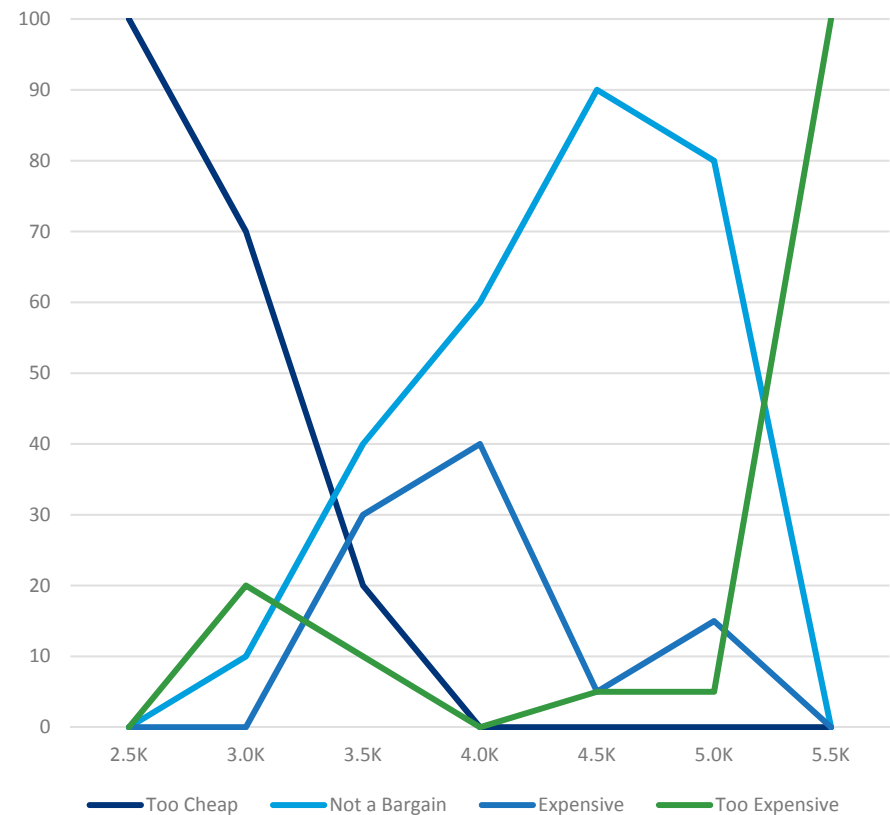


# Stakeholder Feedback – Multiple audiences (patients, payers and physicians)

## Range of Prices Tested

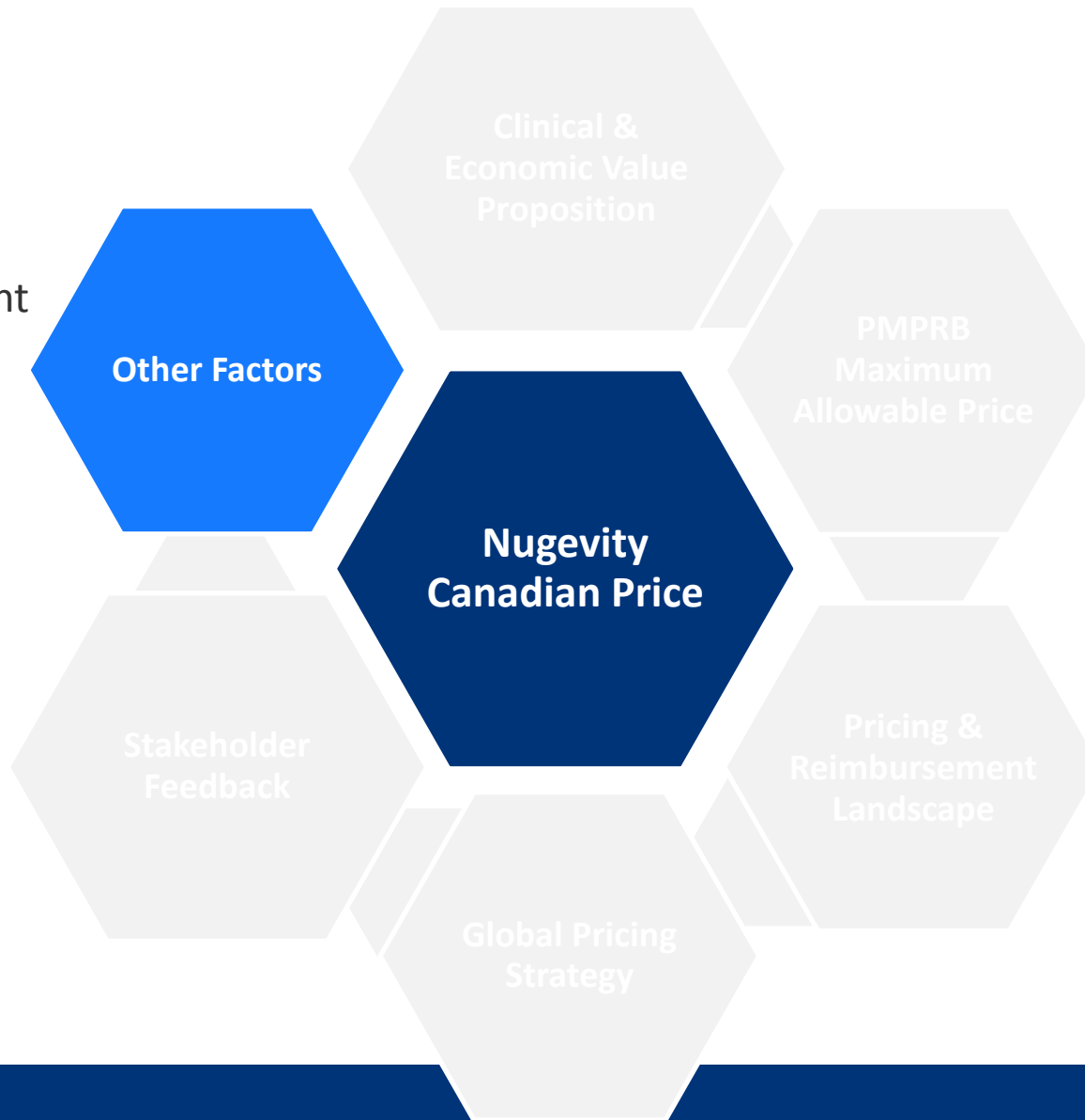
- Nاستانوما background, treatment options presented
- Nugevity value presented
- Range of monthly prices tested
  - \$2,500-\$7,500 in \$500 increments
- Participants rate level of "expensiveness"

## Range of acceptable prices \$3,500 – \$5,000/mth



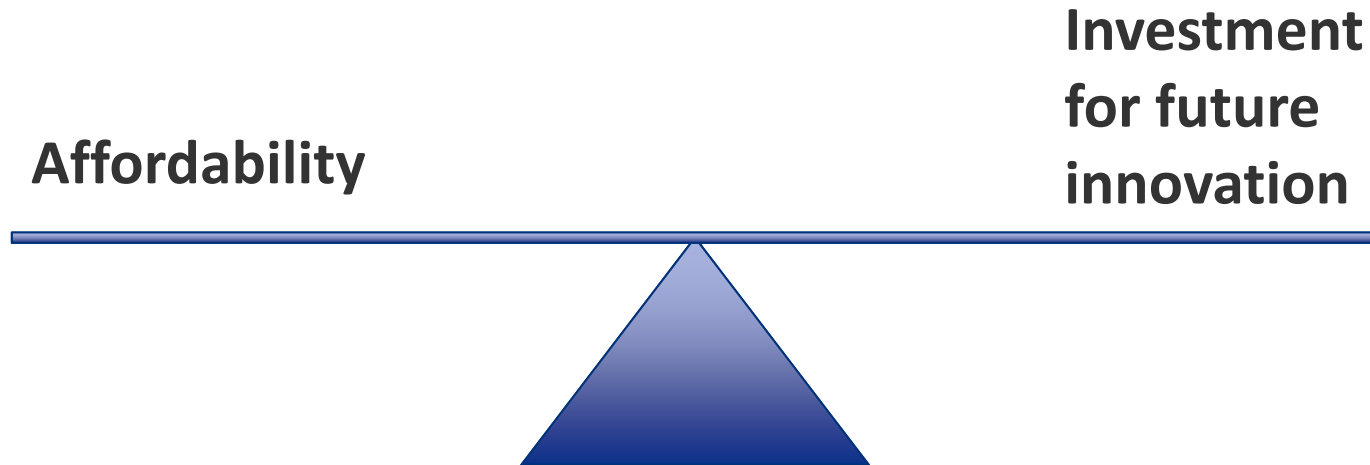
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# Nugevity Pricing Strategy Development

## Inputs

## Considerations

Nugevity Value Proposition



High value for both patients & healthcare system warrants price premium vs. Cytokil

PMPRB Maximum Allowable Price (MAPP)



Value warrants price at the PMPRB ceiling

Pricing & Reimbursement (P&R) Landscape



Medium probability of a positive HTA economic review

Global Pricing Strategy



Acceptable Canadian price slightly lower than global range – need to negotiate

Stakeholder input/feedback



\$5,000/cycle is the upper limit of acceptable prices

Other Factors



Affordable for the payer, and recoup investment based on market size and treatment duration

**Thank you**