



# LES 2021 ANNUAL MEETING

## Reimagining the Future

### *The State of Licensing in the Life Science Industry – A Global View*

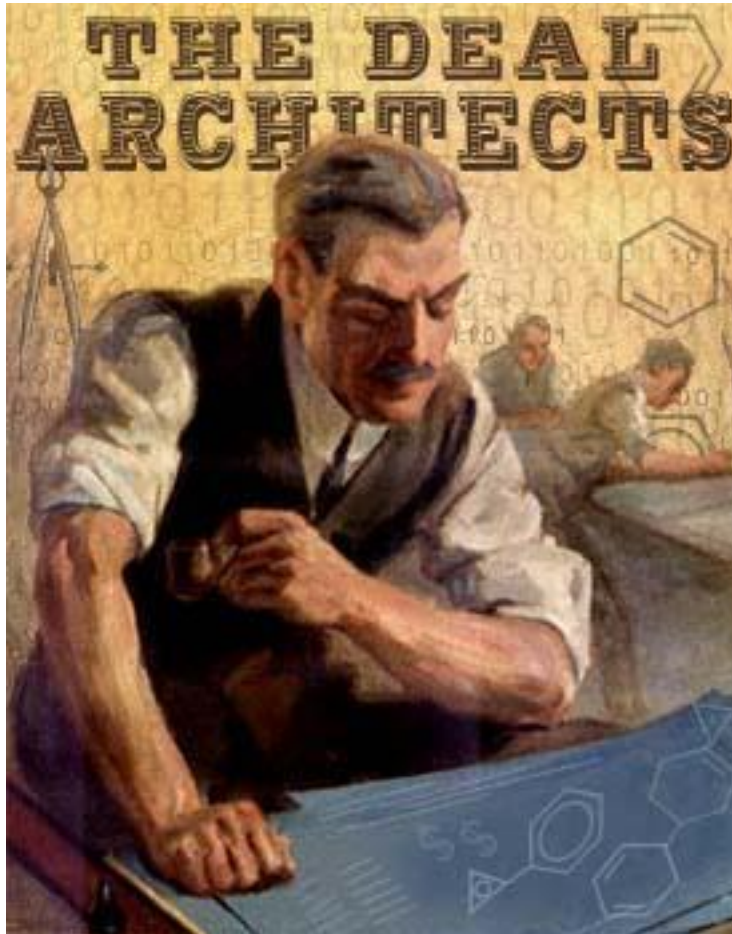
Mark G. Edwards  
Managing Director

**BIO****SCIDB**  
Part of Evaluate Ltd.

# The State of Licensing in the Life Science Industry – A Global View

- Lessons from “Deals of Distinction” Nominees
- IPO Class of 2013 to 2021 – New Kids on the Block
- Life Science Acquisitions – The Attraction of Scale
- Greater China Alliances – Changing the BD&L Game

## Life Science Licensing: Lessons from “Deals of Distinction”



For several years BioSci has assembled top biopharma alliances for consideration as the LES “Deal of Distinction” in Life Sciences

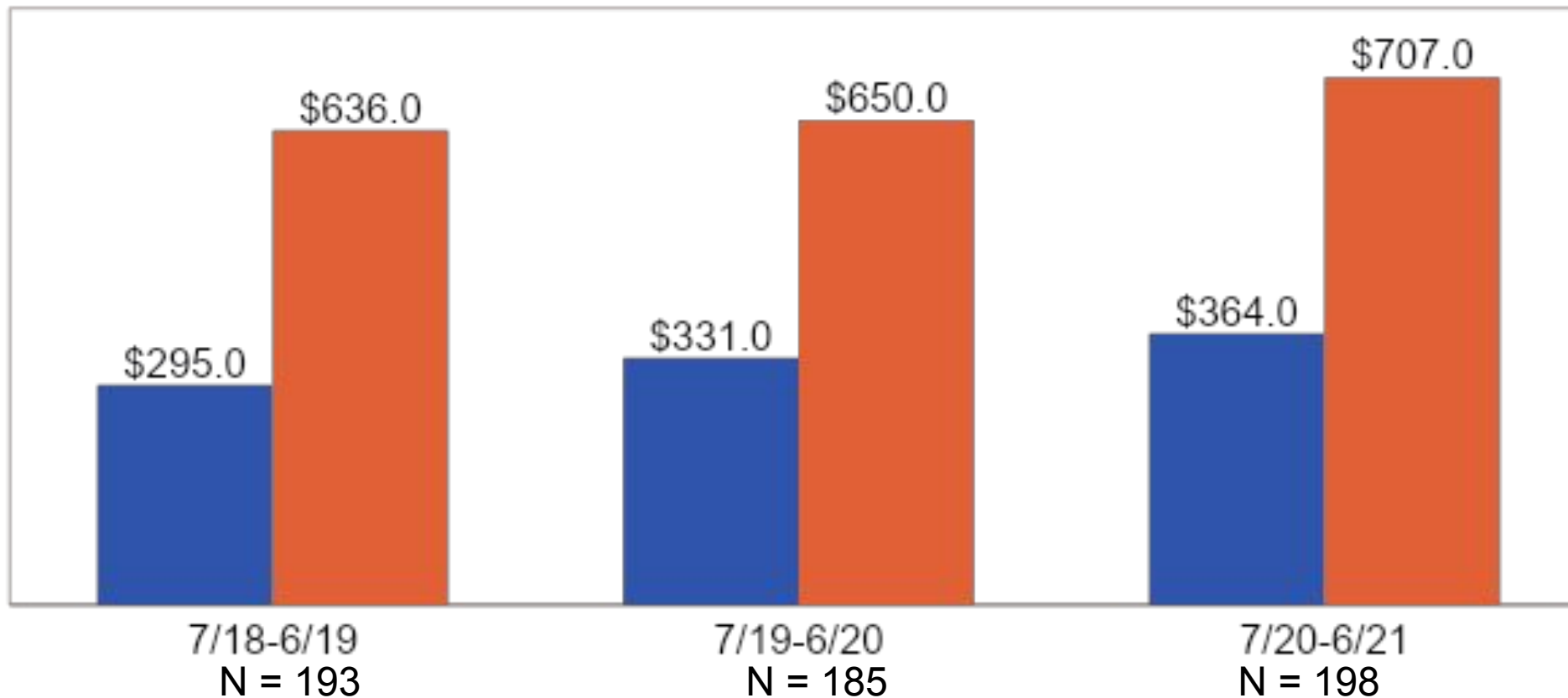
### Criteria for Deal Nomination:

- Signed within year to 6/30
- \$50M+ in Total Deal Size
- No Acquisition/Asset Deals

## Approximately 200 Life Science Deals Each Year Were Considered for “Deals of Distinction” Award

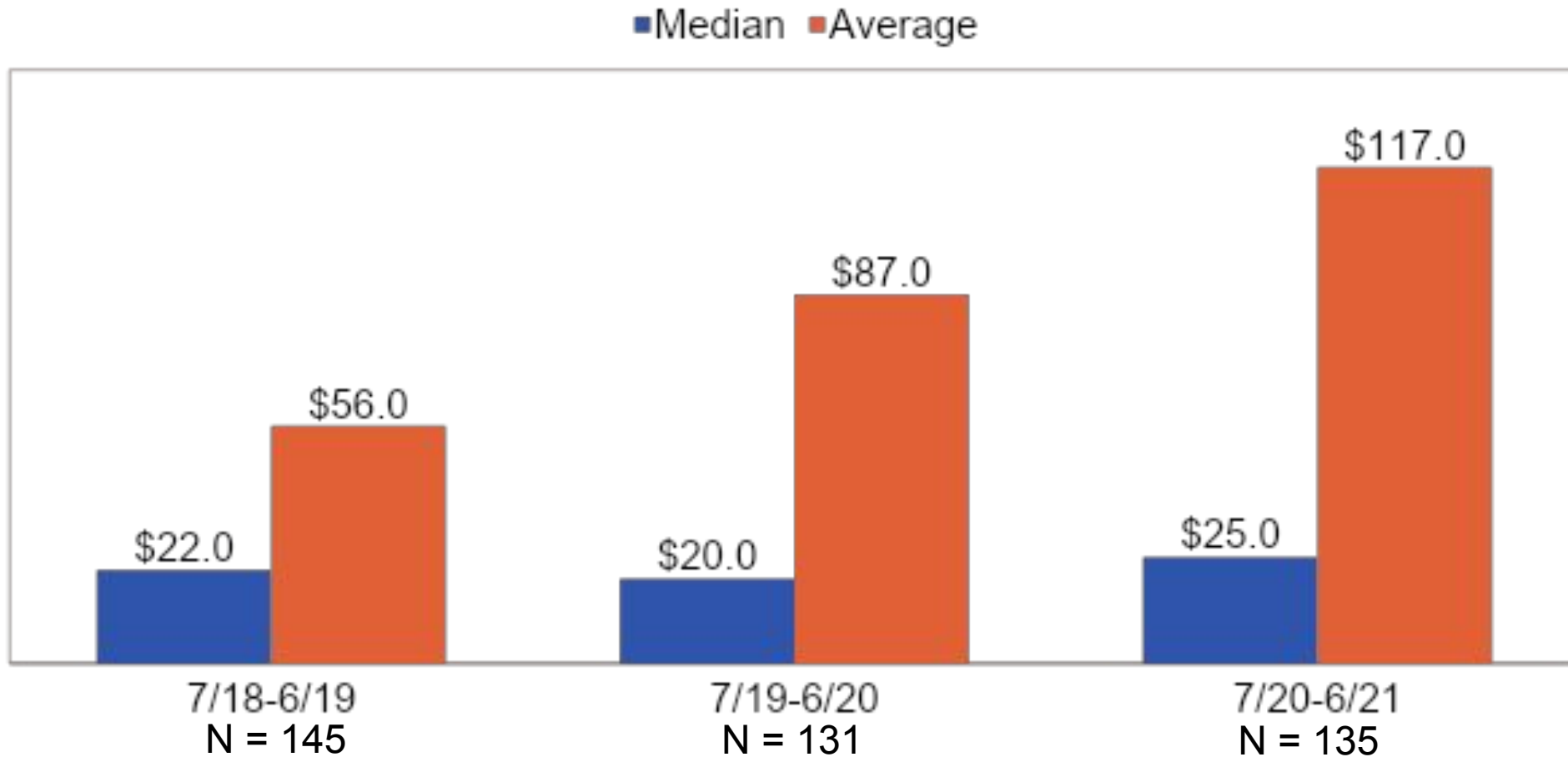
Total Deal Size by Year of Signing (\$M)

■ Median ■ Average

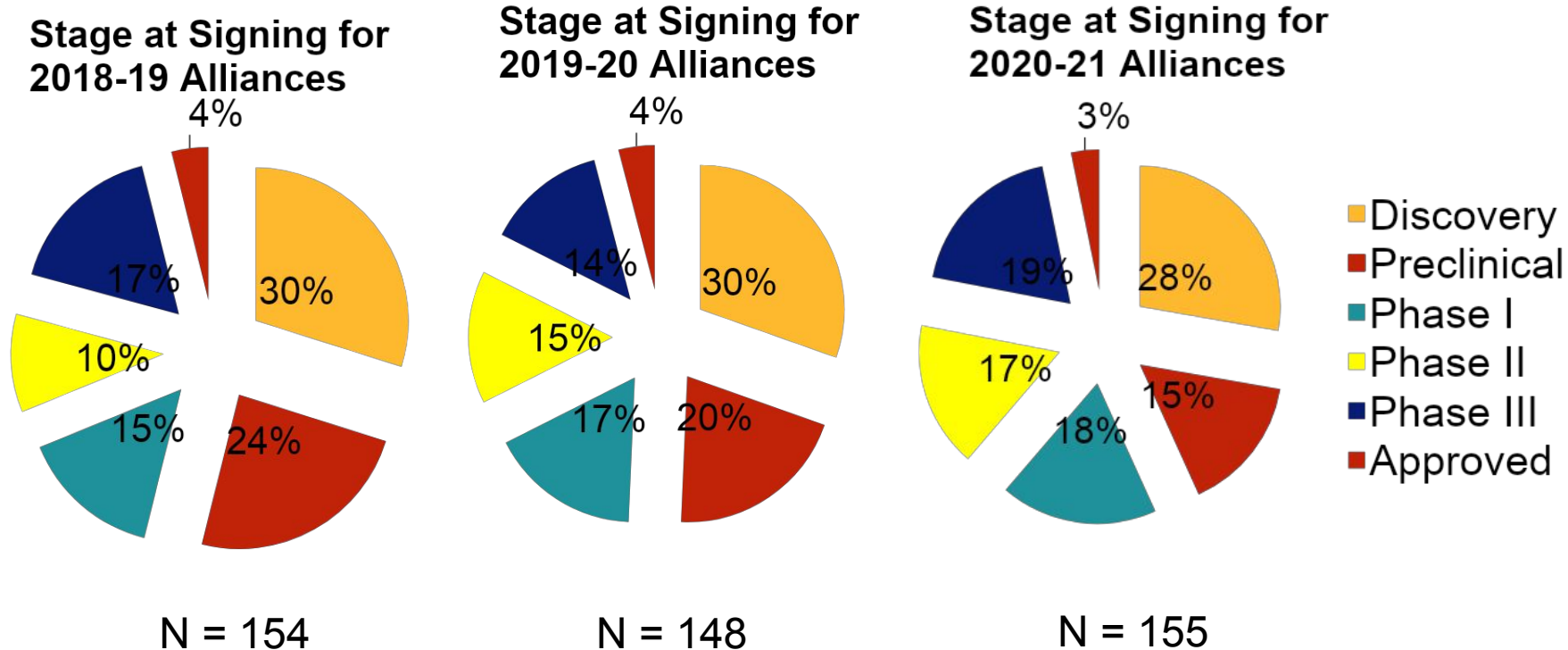


# Average Upfront Payments Have Roughly Doubled Over the Past Three Years, While Median are Stable

Upfront Payment by Year of Signing (\$M)

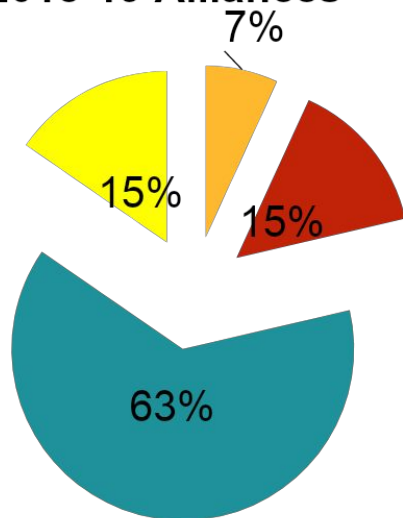


## Stage at Signing is Later for Recent Alliances, With Fewer Preclinical Deals & More at Phase II & III



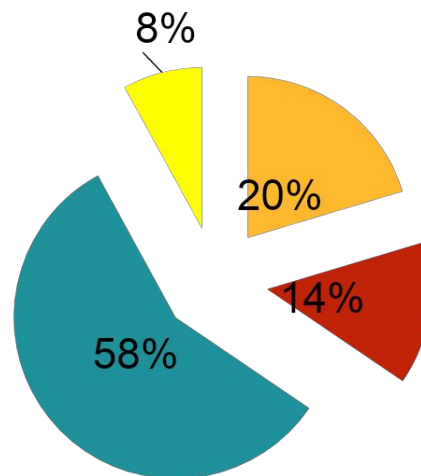
## Cancer Remains the Dominant Therapeutic Area, But Antiviral Alliances Have Moved Up to 2nd Place

Top TAs for  
2018-19 Alliances



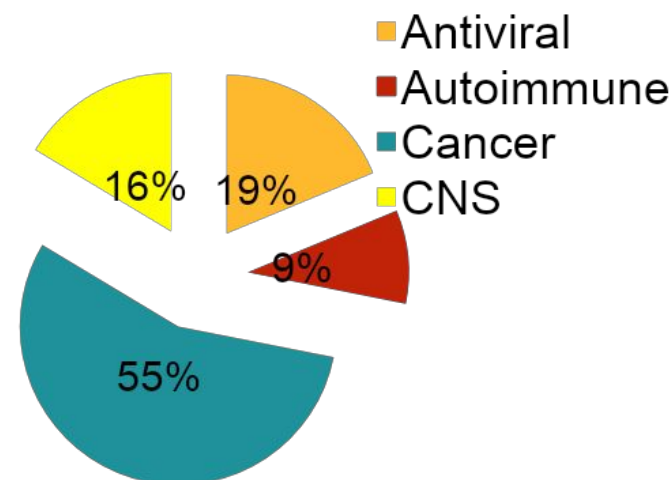
N = 117

Top TAs for  
2019-20 Alliances



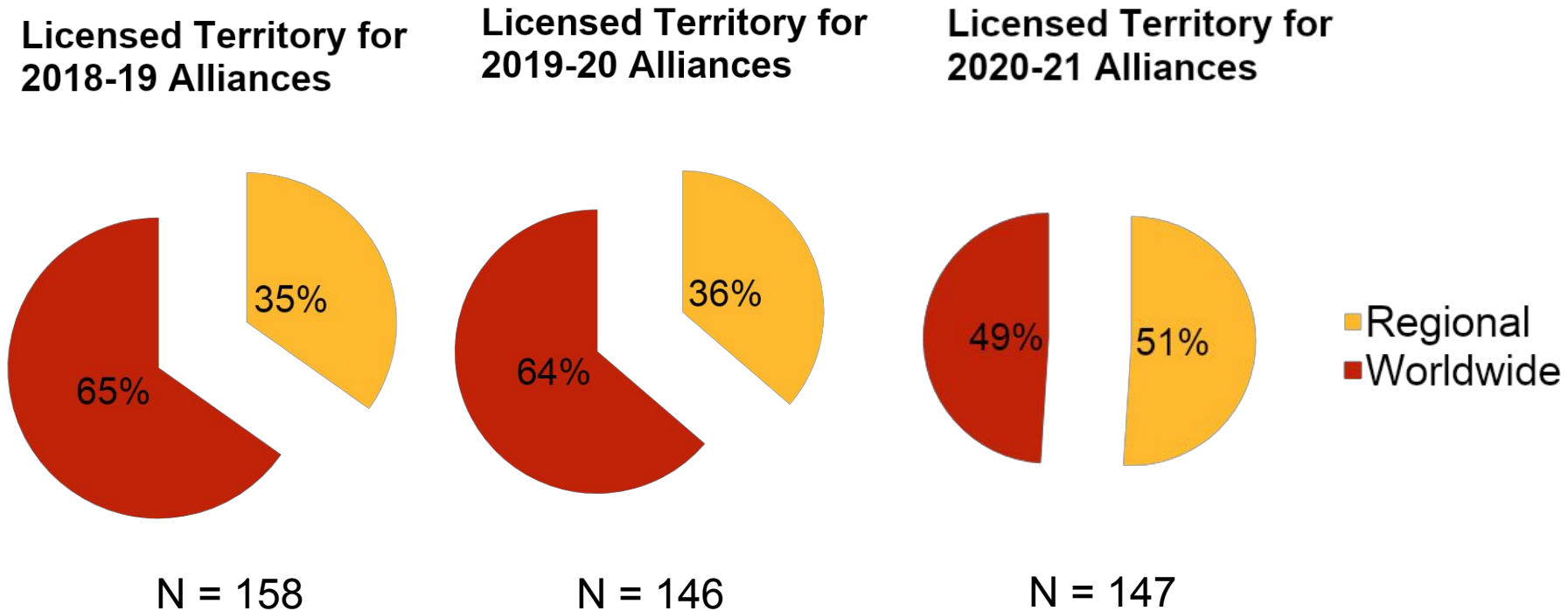
N = 113

Top TAs for  
2020-21 Alliances

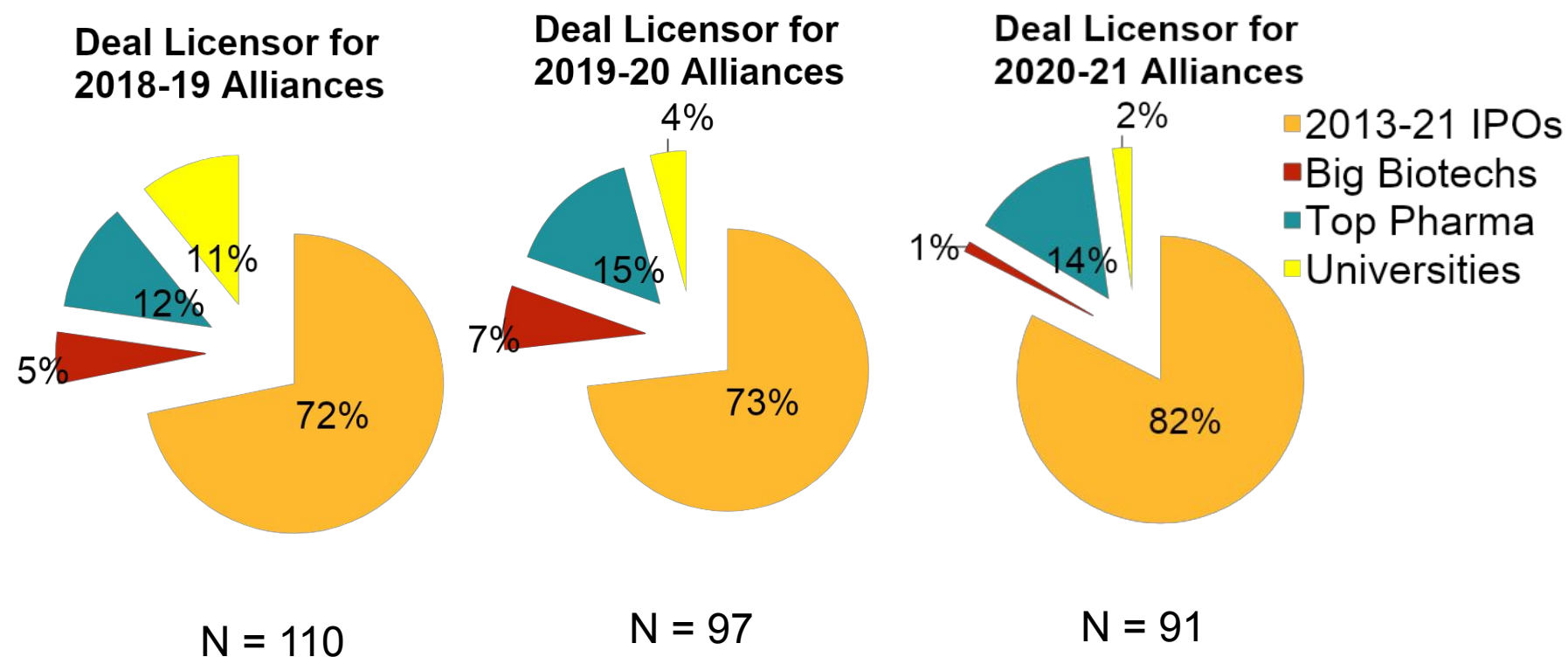


N = 128

## This Past Year Saw a Significant Jump in Regional Alliances Versus Worldwide Deals

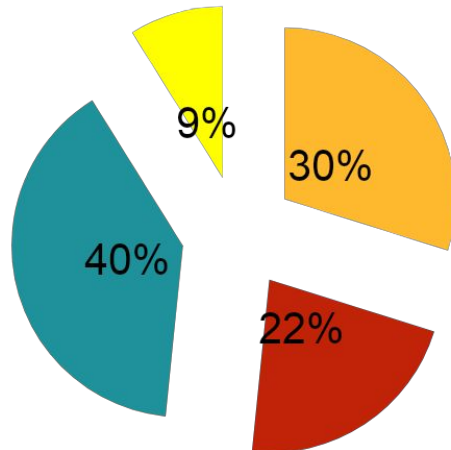


## Biotech Companies in the IPO Class of 2013 to 2021 Have Been the Dominant Licensors Over the Past Three Years



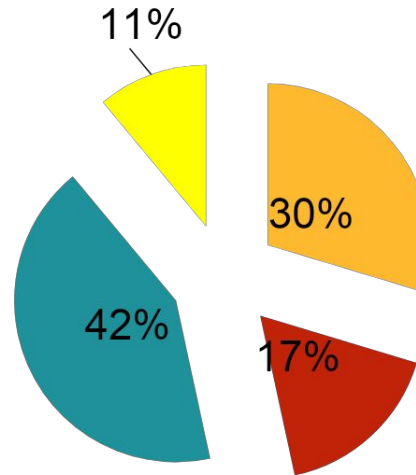
# Biotech Companies in the IPO Class of 2013 to 2021 Have Also Taken 2nd Place Behind Top Pharma as Licensee

Deal Licensee for  
2018-19 Alliances



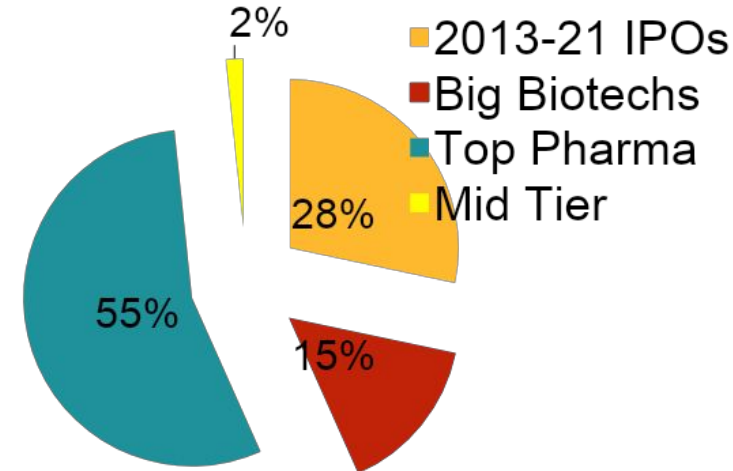
N = 124

Deal Licensee for  
2019-20 Alliances



N = 118

Deal Licensee for  
2020-21 Alliances









N = 120

2013-21 IPOs  
Big Biotechs  
Top Pharma  
Mid Tier

# The State of Licensing in the Life Science Industry – A Global View

## □ Lessons from “Deals of Distinction” Nominees

- Total Deal Size is  on an Average & Median Basis
- Upfront Payments are  on an Average Basis
- Preclinical Deals  and Phase II & III are 
- Antiviral Deals , but Cancer is Still Dominant
- Regional Deals  in Past Year, Ending Worldwide Edge
- IPO Class of 2013-21 is Dominant Deal Licensor
- Top Pharma is Dominant Licensee, then IPO Class next

## □ IPO Class of 2013 to 2021 – New Kids on the Block

## □ Life Science Acquisitions – The Attraction of Scale

## □ Greater China Alliances – Changing the Game

## New Kids on the Block: Why the IPO Class of 2013-21 Matters

- Approximately 1000 Life Science Companies are Currently Publicly Traded on US Stock Exchanges:
  - IPO Class of 2013-21 (60%)
  - Non-US Companies Cross-Listing (10%)
  - All Other Life Science Companies (30%)
- From January 2013 thru June 2021, 568 Life Science Companies Have:
  - Raised \$70.7B in IPO Proceeds
  - Posted \$370B in Post-IPO Market Capitalization

# Recent Life Science IPOs Show No Sign Of Ending the 8+ Year Financing Window

IPO Proceeds by Year of IPO (\$M)

■ Median ■ Average



7/18-6/19

N = 62

7/19-6/20

N = 60

7/20-6/21

N = 123

Aggregate  
\$ Raised:

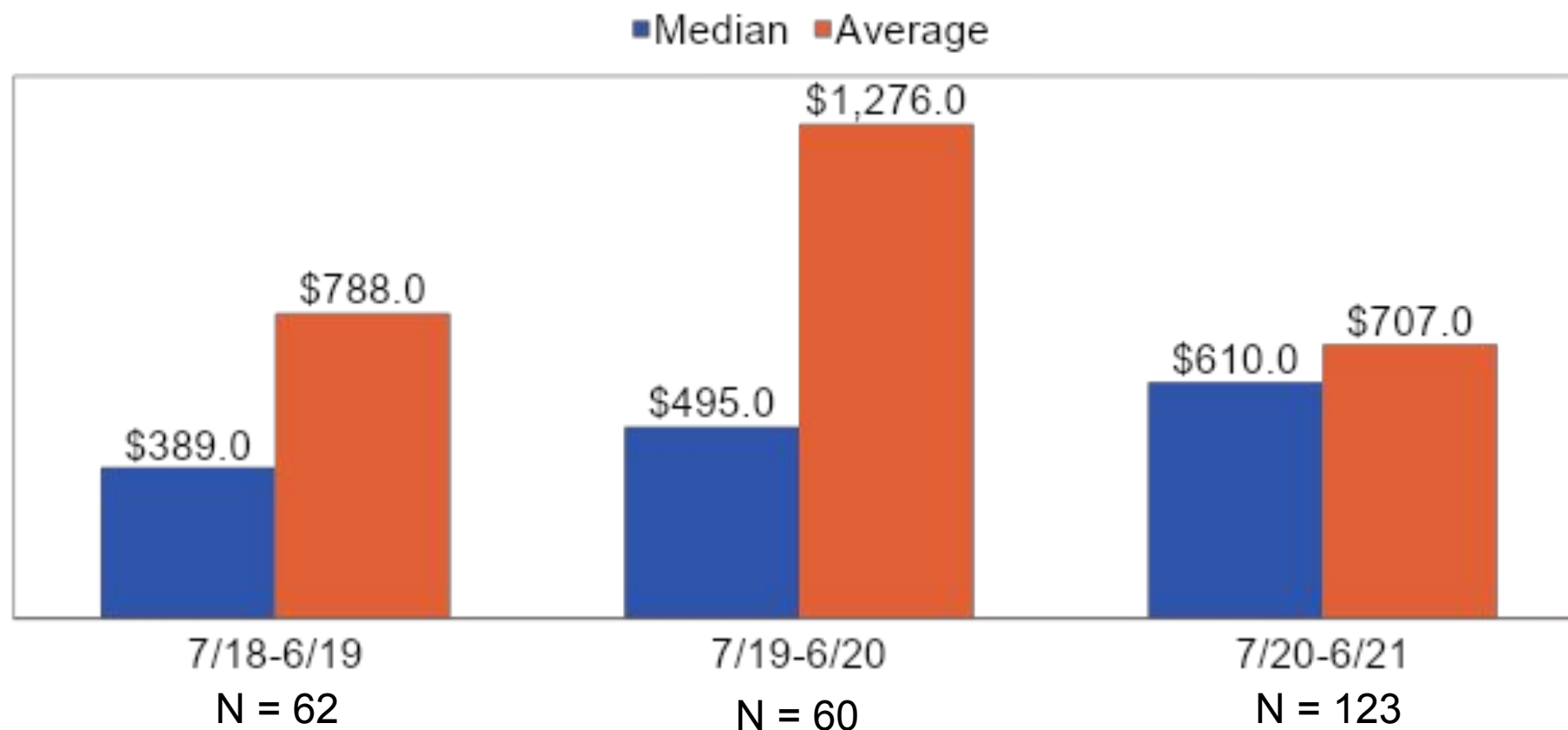
\$8.5B

\$11.5B

\$21.7B

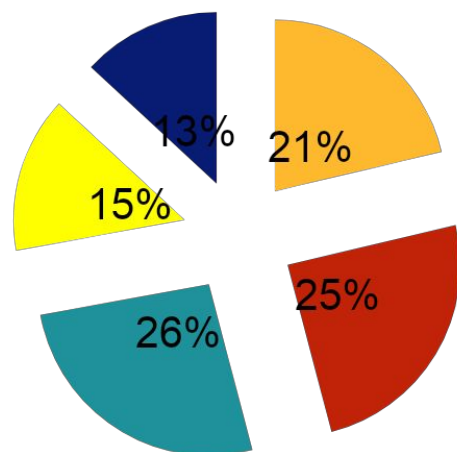
# Median Post-IPO Market Capitalizations Have Risen Steadily in Recent Years

Post-IPO Market Cap by Year of IPO (\$M)



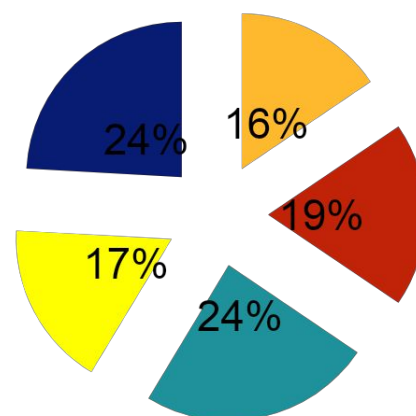
## With IPO Class as Dominant Deal Licensors (& 2nd Most Active Licensees), Stage of Program Development at IPO Matters

Stage of Lead Program  
for 2018-19 IPOs



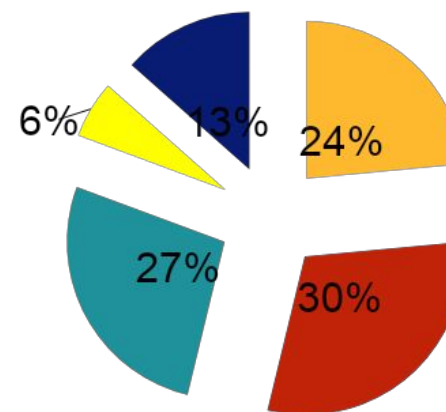
N = 61

Stage of Lead Program  
for 2019-20 IPOs



N = 58

Stage of Lead Program  
for 2020-21 IPOs

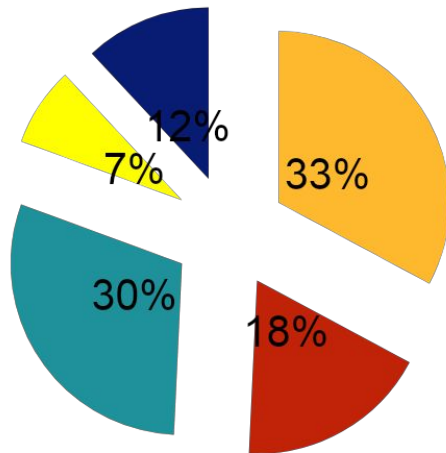


N = 119



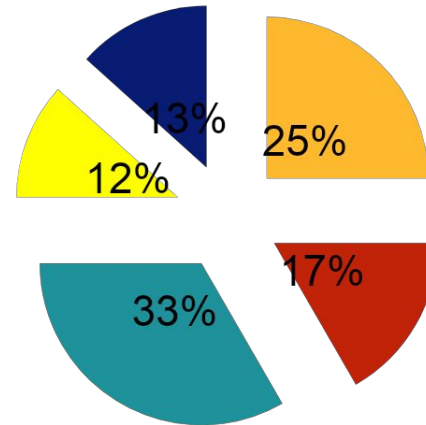
## More Recent IPO Companies Have European Headquarters, But California and Massachusetts Still Dominate IPO HQs

Corp Headquarters  
for 2018-19 IPOs



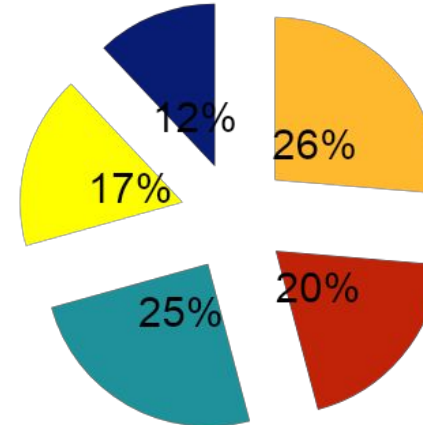
N = 62

Corp Headquarters  
for 2019-20 IPOs



N = 60

Corp Headquarters  
for 2020-21 IPOs



N = 123

California  
Mass  
Other NA  
Europe  
ROW

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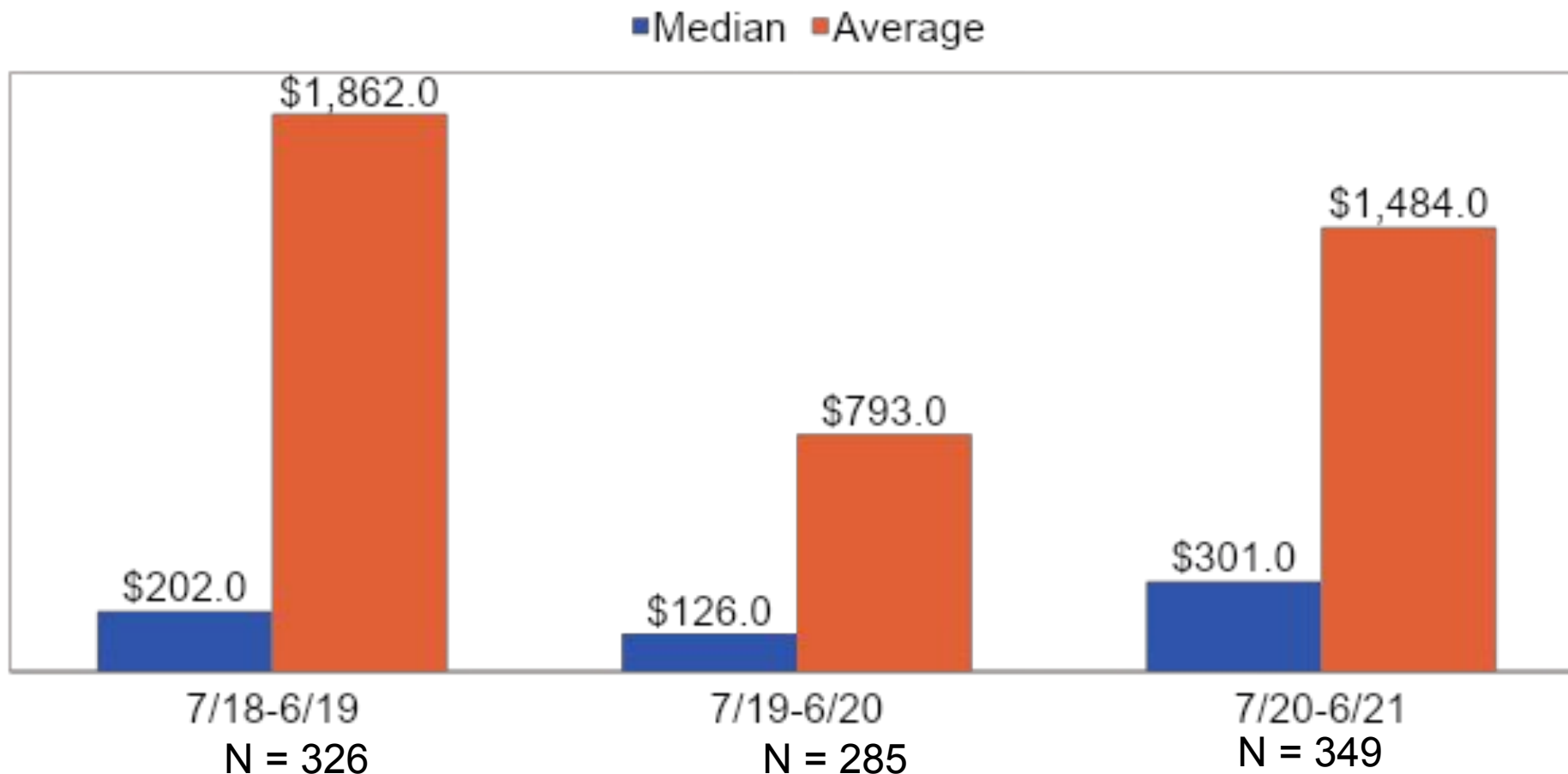
- Lessons from “Deals of Distinction” Nominees
- IPO Class of 2013 to 2021 – New Kids on the Block
  - 60% of Public Biotechs Went IPO Since 2013
  - As Many IPOs Closed Last Year as in the Prior Two
  - Median IPO Size ↑ 25% Per Year to \$600M
  - Recent IPOs Have Had Earlier Stage Lead Programs
  - European IPOs are ↑, But CA & MA Still Dominate
- Life Science Acquisitions – The Attraction of Scale
- Greater China Alliances – Changing the BD&L Game

## The Attraction of Scale: Life Science Companies Undertake More/Larger M&A

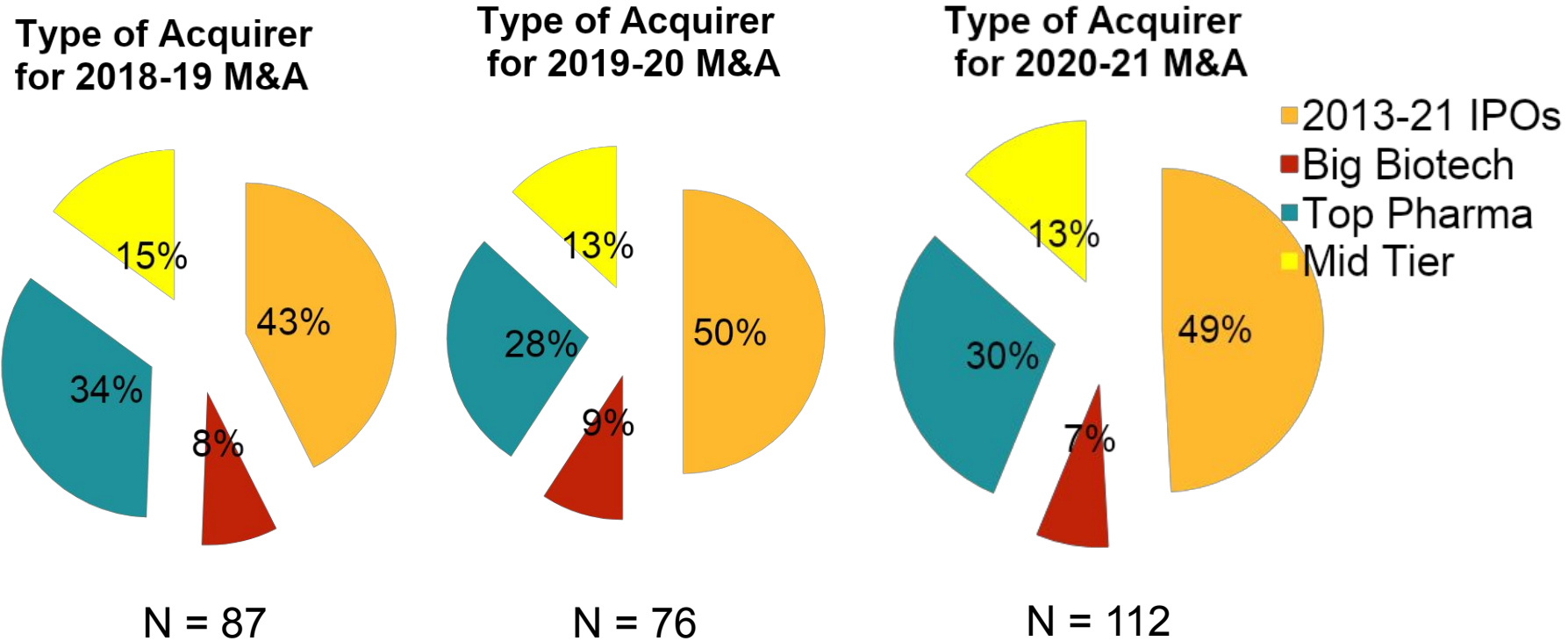
- 960 Life Science Acquisitions & Asset Purchases Over the Past Three Years:
  - \$650B in Total Announced Deal Value
  - \$236B in Latest Year, Led by Alexion/AZ & Immunomedics/Gilead Deals
  
- 85 Public Life Science Companies Have Been Acquired Over the Past Three Years:
  - 54% of Public Co Acquisitions Were Members of the IPO Class of 2013-21

# Announced Purchase Price of Life Science Acquisitions & Asset Purchases, Including Contingent Payments

## Total Deal Size by Year of Transaction (\$M)



# IPO Class Members Have Recently Emerged as the Dominant Acquirers of Life Science Companies



# The State of Licensing in the Life Science Industry – A Global View

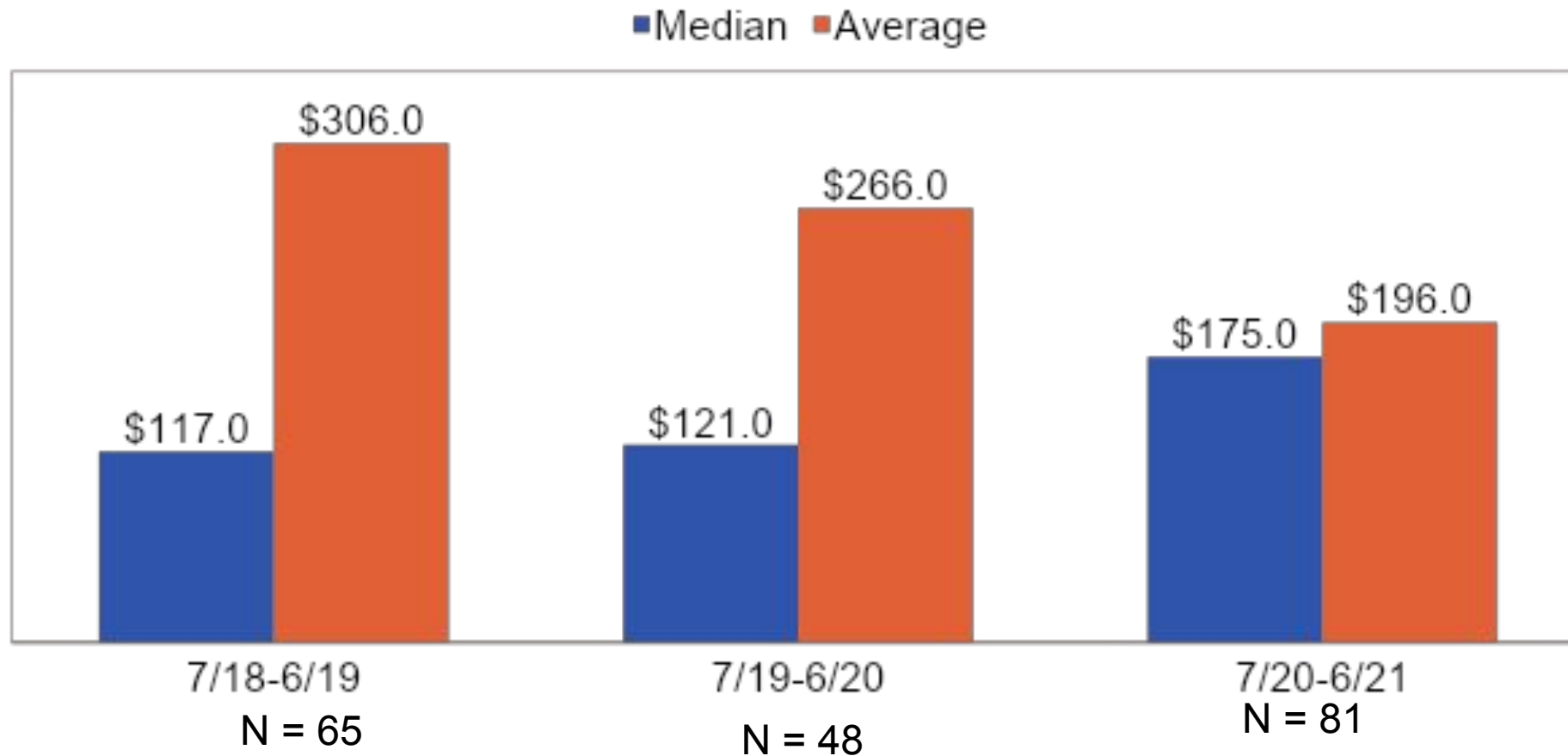
- Lessons from “Deals of Distinction” Nominees
- IPO Class of 2013 to 2021 – New Kids on the Block
- Life Science Acquisitions – The Attraction of Scale
  - M&A Has Doubled in Aggregate & on Median Basis
  - 2013 to 2021 IPOs are Dominant M&A Participants
- Greater China Alliances – Changing the BD&L Game

## Changing the BD&L Game: Life Science Companies Go to China to Offset Dev Costs

- 194 Greater China Licenses Over the Past Three Years:
  - \$23B in Total Announced Alliance Value
  - “Greater China” Deals May Also Include, Taiwan, S. Korea & ASEAN Countries
- IPO Class of 2013-21 Are Dominant Licensors of Greater China Deals in Recent Years
  - 23% of Greater China Alliances Were Licensed by Members of the IPO Class of 2013-21

# Life Science BD&L Executives Have Found A Reliable Option in Greater China Licenses

Total Deal Size by Year of Signing (\$M)



# Regional Phase III License for Nasal Cardio Compound in Greater China

## Etripamil Nasal Calcium Channel Blocker for Treatment of Paroxysmal Supraventricular Tachycardia (5/21)

Milestone Pharm

- \$15M upfront payment
- \$5M in pre-paid eq warrants
- Ji Xing pays dev costs in Territory
- \$15.5M in dev/reg milestones
- \$92M in sales milestones

Ji Xing

Milestone will supply at  
Manu Cost plus CON %

Low Double-digit  
to High  
Double-digit  
Royalties

Ji Xing has ROFN for  
Competing Products &  
ROFR for Other Products

# Regional Phase II License for Oral Cancer Compound in Greater China

## Adagrasib KRAS Inhibitor for Treatment of Lung & Colorectal Cancer (5/21)

Mirati  
Therapeutics

- \$65M upfront payment
- Zai pays dev costs in China for local studies & China trials in global studies
  - \$93M in dev/reg milestones
  - \$180M in sales milestones

Zai Lab

Mirati has option to  
co-commercialize in  
Greater China for FTE  
reimb plus add'l royalty

High Teen to Low  
Twenties  
Royalties

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- Greater China Alliances – Changing the BD&L Game
  - China Licenses Getting Richer on Median Basis
  - IPO Class Views Greater China as Reliable Source of Development Funding