



Inserm

Institut national
de la santé et de la recherche médicale



Self-assembly of Azacitidine Prodrugs for the Treatment of Myelodysplastic syndromes

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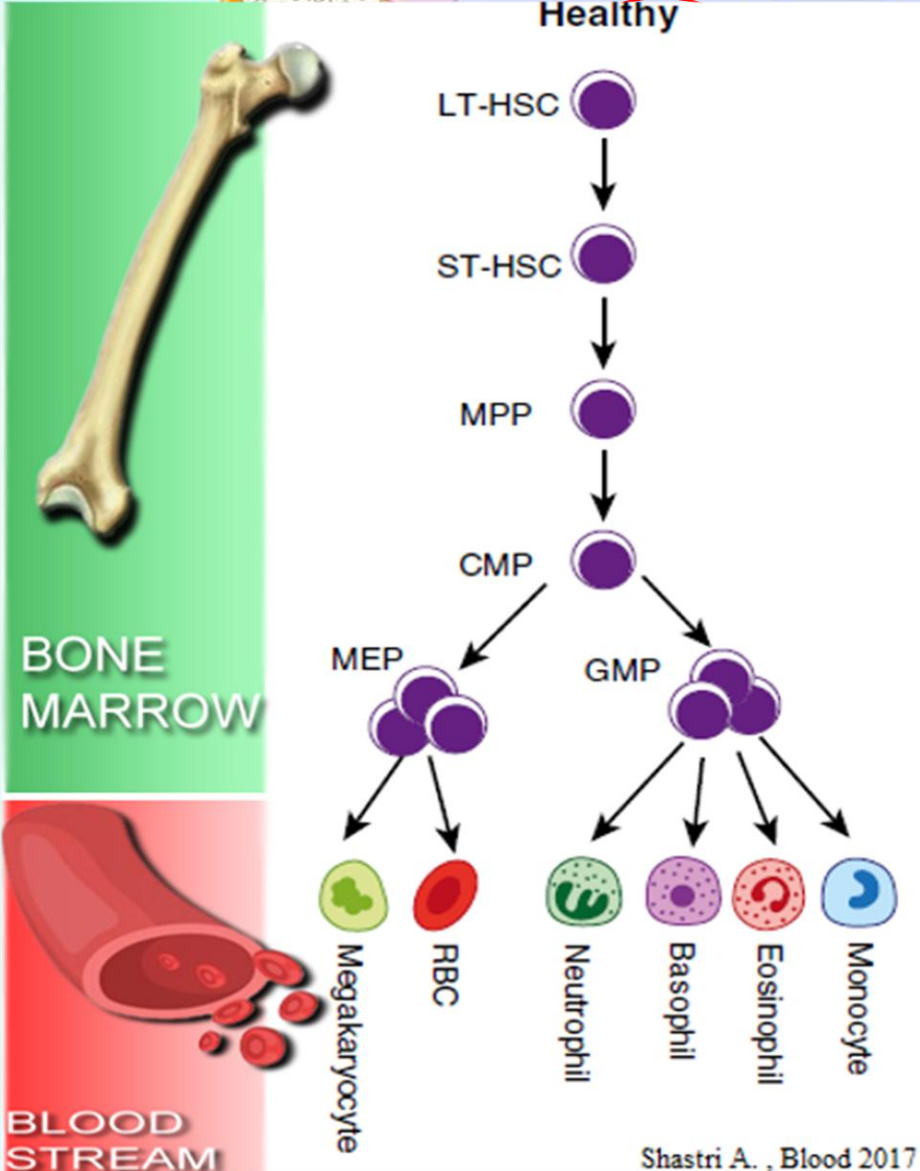
Dr. Yolla ELMAKOUR

Collaborators:

Dr. Sylvain THÉPOT

NA

Myelodysplastic syndromes



RNR

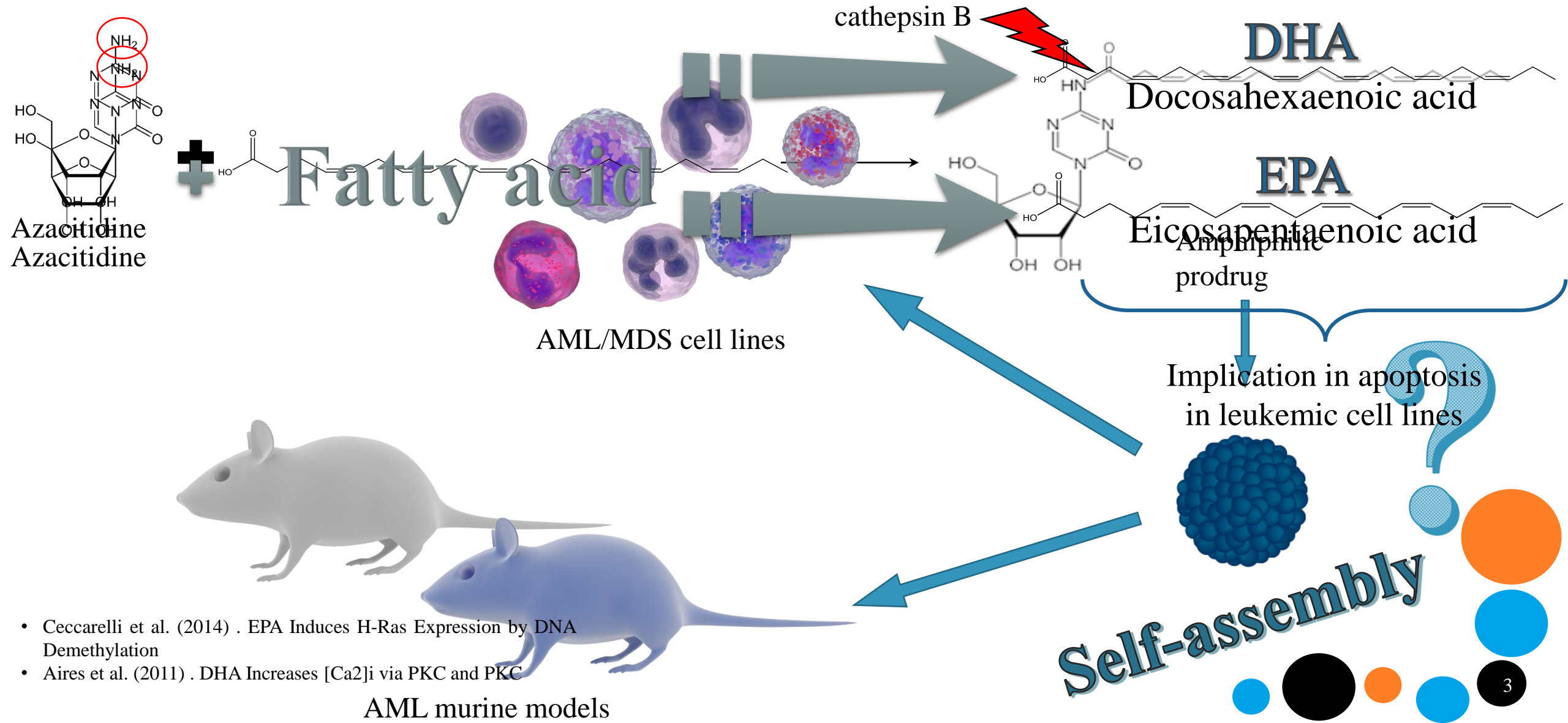
Setbacks

NH₂

Risk groups	Percentage of people who develops AML *	Treatments
Very low	3 %	Supportive
Low	14 %	
Intermediate	33 %	Chemotherapy/ Stem cell transplant
High	54 %	
Very high	84 %	

5-Azacytidine

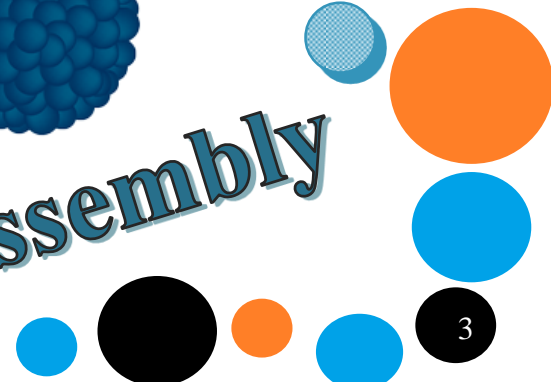
* World Health Organization (2016)

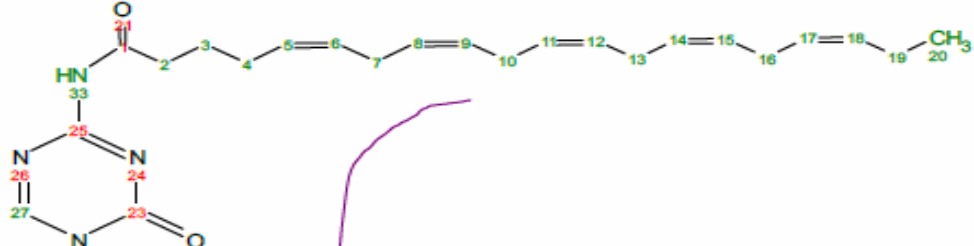


- Ceccarelli et al. (2014) . EPA Induces H-Ras Expression by DNA Demethylation
- Aires et al. (2011) . DHA Increases [Ca²⁺]_i via PKC and PKC

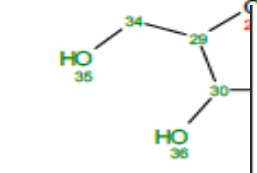
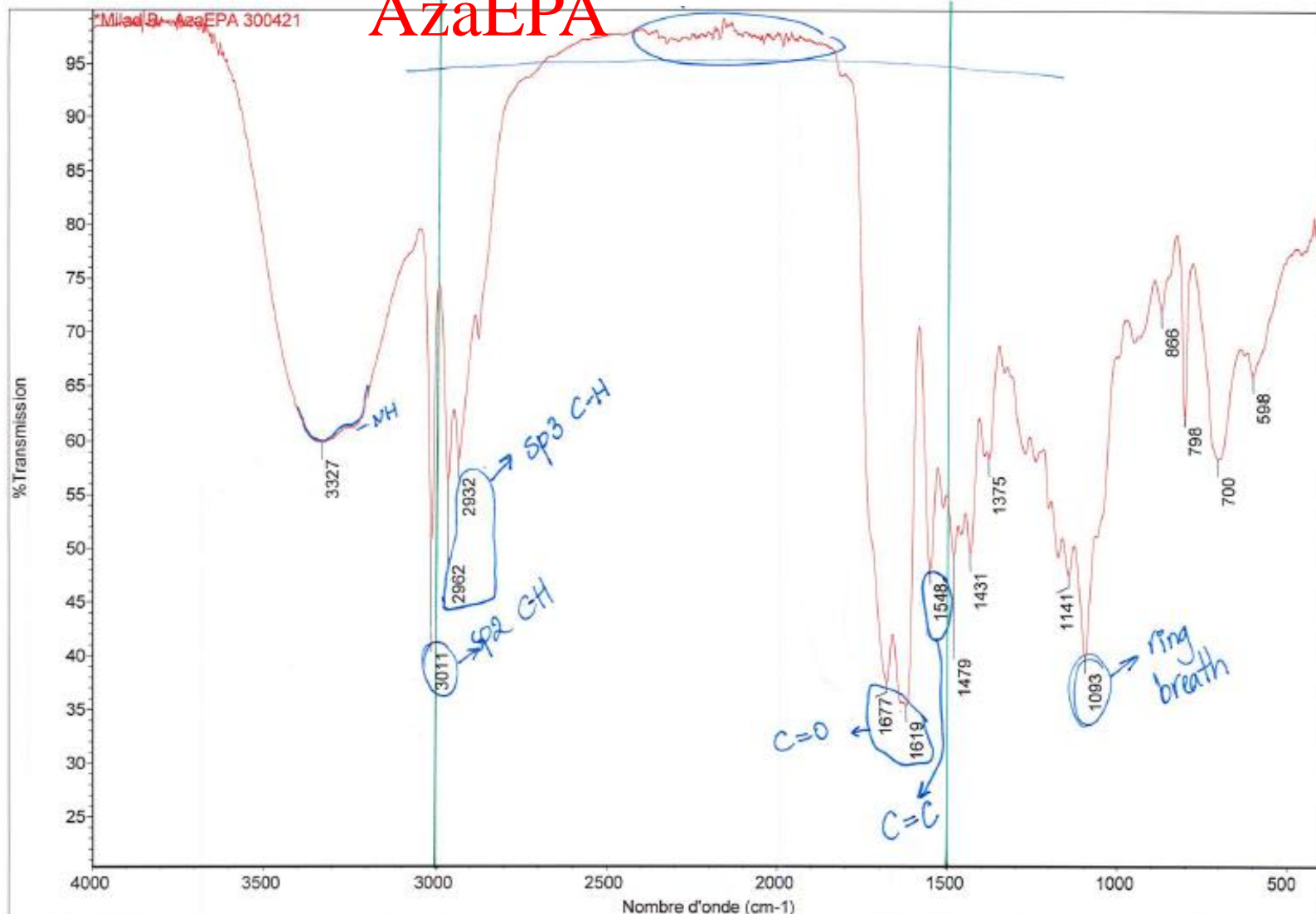
AML murine models

Self-assembly

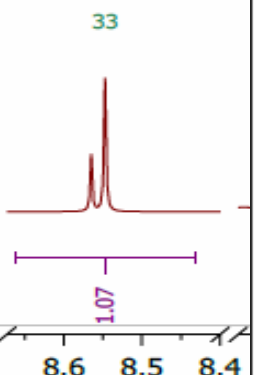




AzaEPA



N (d)
8.56

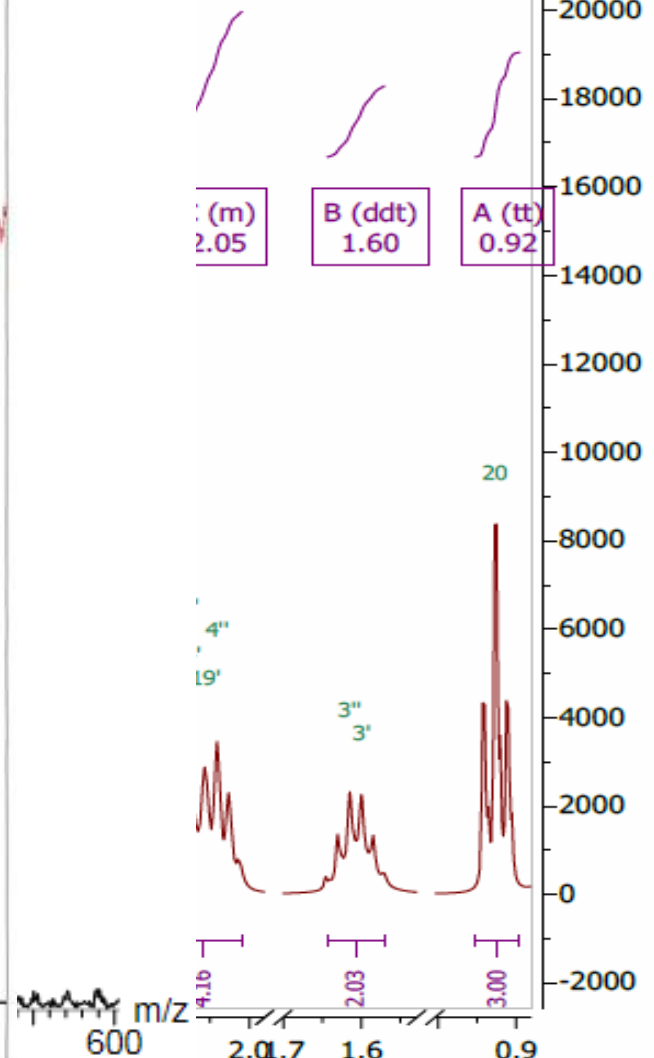


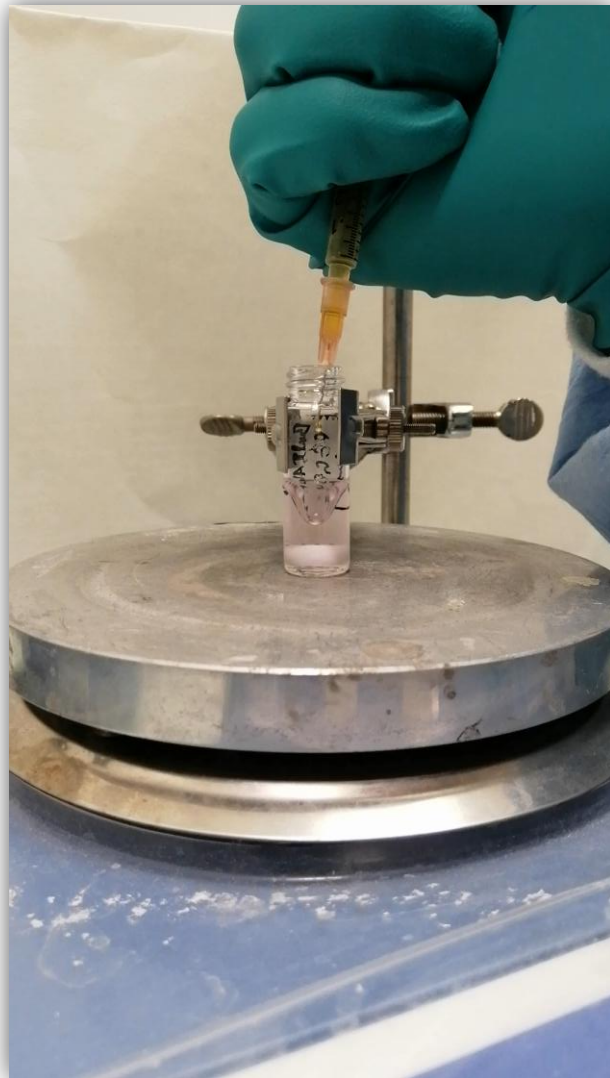
2.48e7

(m)
2.05

B (ddt)
1.60

A (tt)
0.92



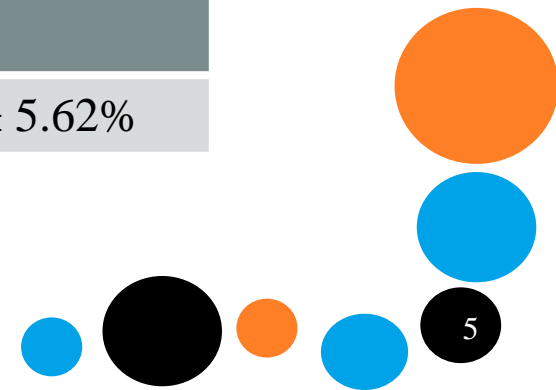


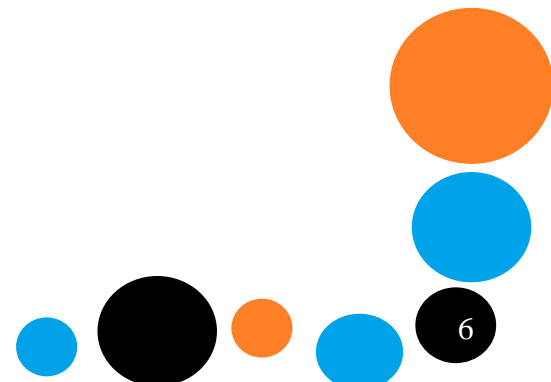
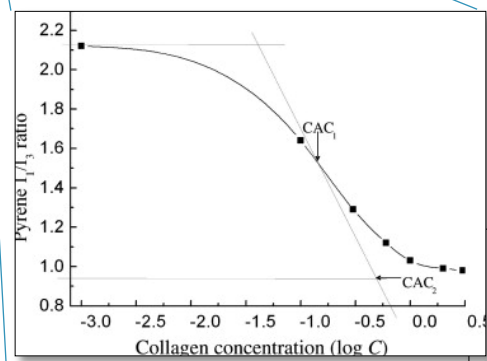
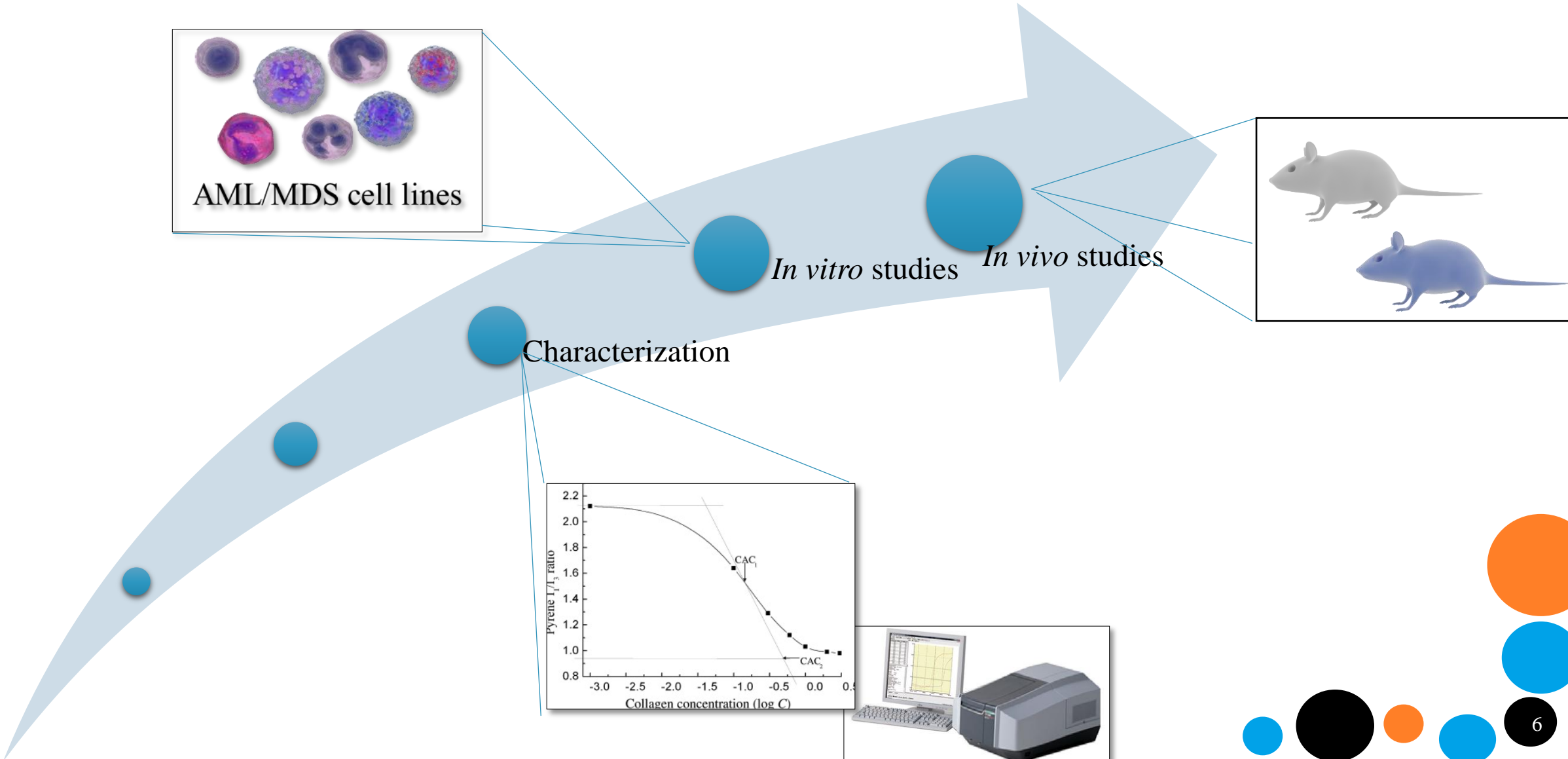
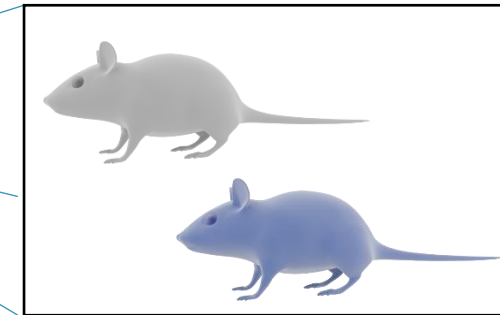
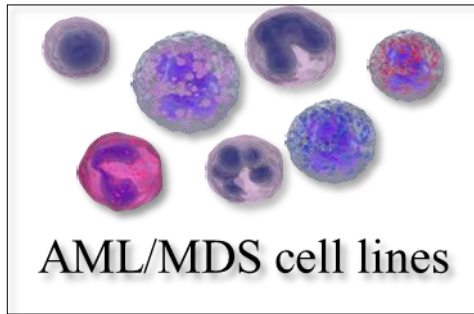
AzaEPA

Z Average diameter	Zeta potential	PDI
183.3 nm \pm 0.713%	-2.37 mV \pm 29.5%	0.114 \pm 10.2%

AzaDHA

Z Average diameter	Zeta potential	PDI
164.2 nm \pm 0.53%	-3.2 mV \pm 12.25%	0.103 \pm 5.62%







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