

PRÉMATURITÉ TARDIVE

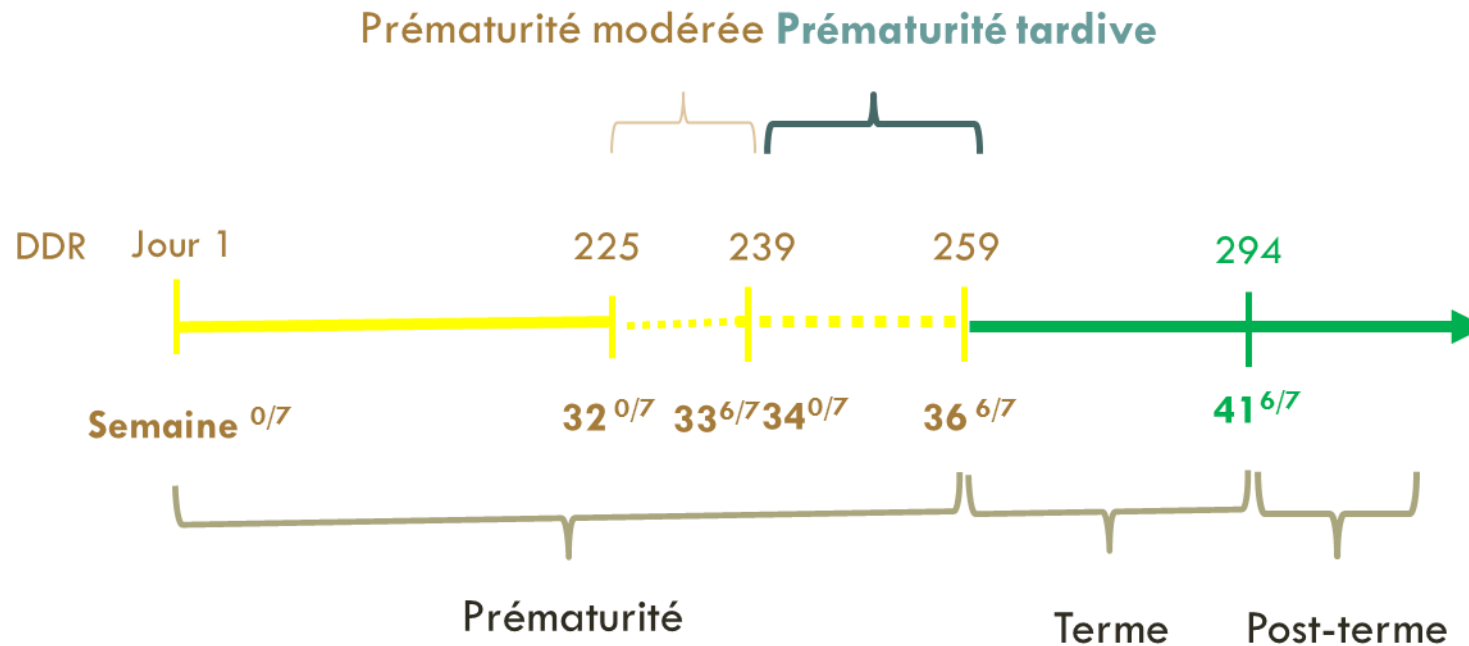
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Hôpital la Conception, Marseille

GEN PACA
28 mai 2016

DÉFINITION *near term* devient *late preterm* en 2005



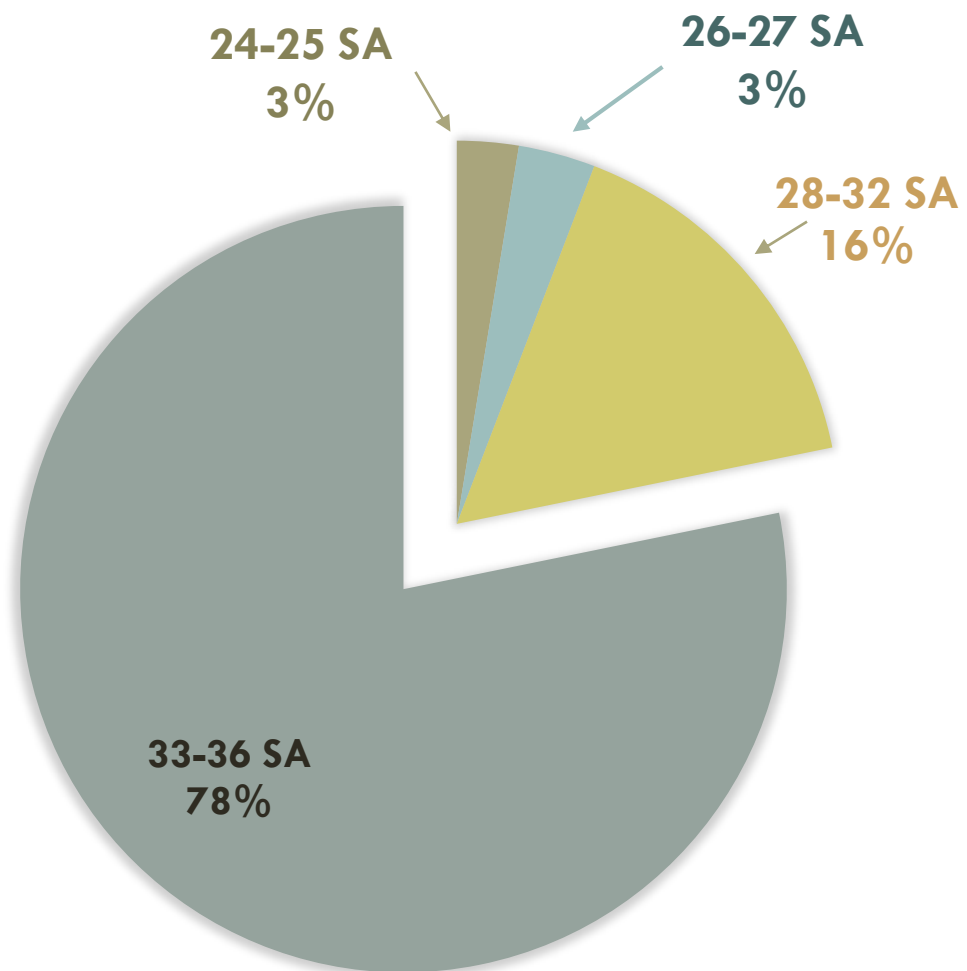
EPIDEMIOLOGIE

Rapport de la DREES 2011 (Direction de la Recherche, des Études, de l'Évaluation et des Statistiques du Ministère de la Santé) : **prématurité totale 7,4% en 2010** (5,9% en 1995) .

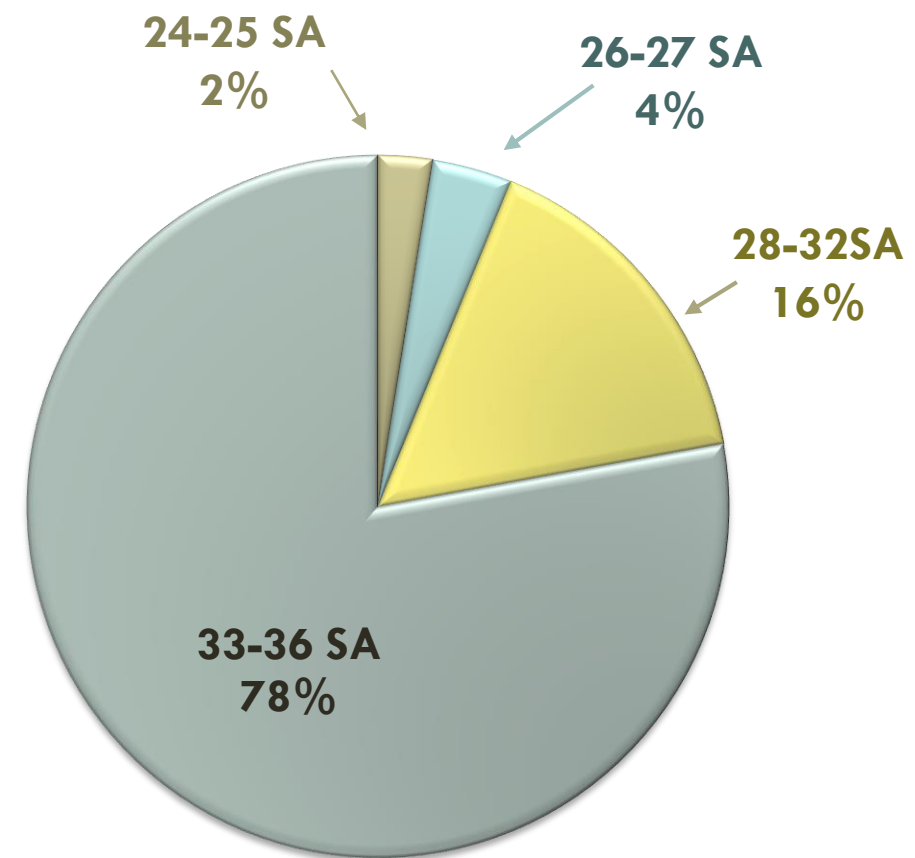
PMSI 2014 = 808 846 naissances en France dont 8% avant 37 SA

	2013	2014
Prématurité globale < 37SA		
PACA	4701 (7%)	4665 (6,9%)
CORSE	194 (6,7%)	208 (6,9%)
FRANCE	67 087 (8,1%)	67 439 (8,3%)
Prématurité modérée 34⁺⁰ - 36⁺⁶ SA		
PACA	3186 (67%)	3248 (69,6%)
CORSE	144 (74%)	158 (76%)
FRANCE	45 425 (67,7%)	45 782 (67,8%)

FRANCE 2014

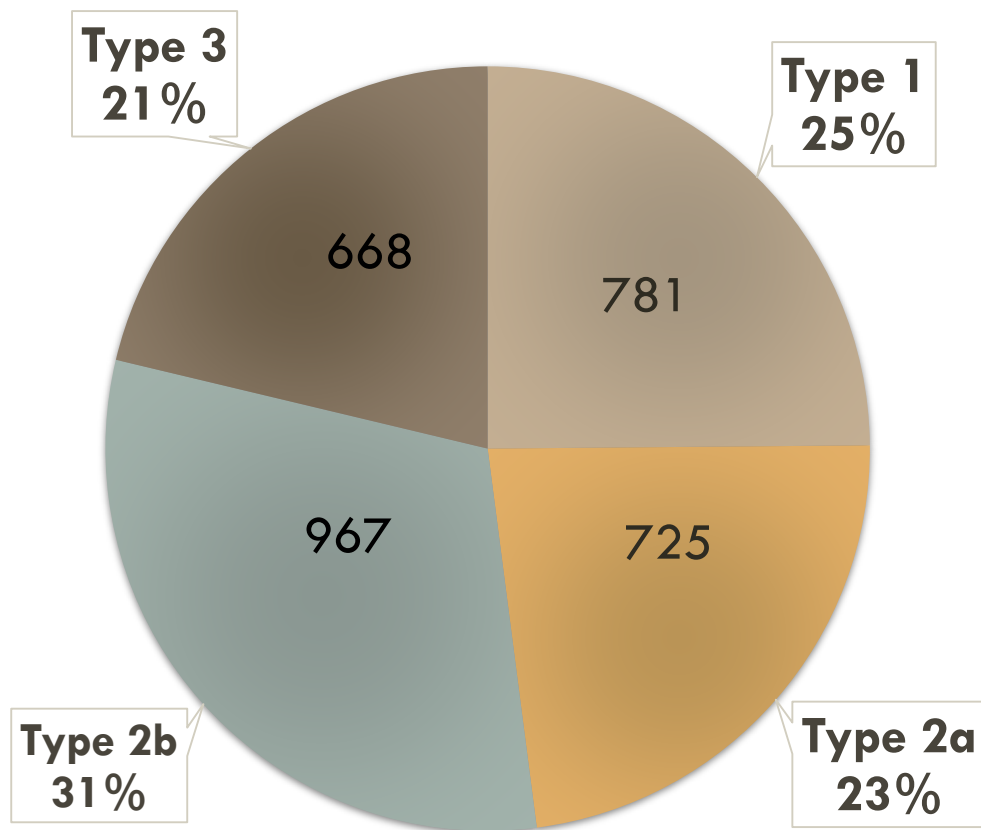


PACA 2014

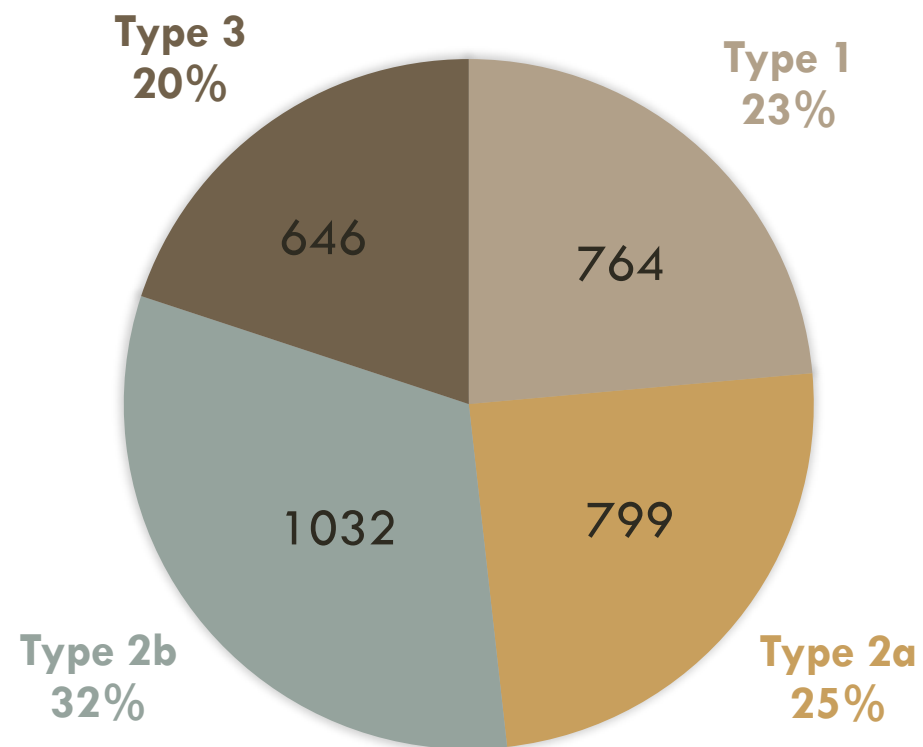


PREMATURTÉ TARDIVE SELON TYPE DE MATERNITÉ EN PACA

2013



2014



PRÉMATURITÉ TARDIVE EN FONCTION DU TYPE DE MATERNITÉ EN PACA

Prématurité tardive	% naissances totales		% naissances < 37SA	
	2013	2014	2013	2014
Type 1	3,6%	3,7%	88%	93,7%
Type 2	5,3%	5,7%	77,3%	78,1%
Type 3	7,3%	7,3%	39,3%	43,3%

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UNE IMMATURITÉ PHYSIOLOGIQUE

Morbidités immédiates :

- Morbidité respiratoire (syndrome de détresse respiratoire, apnées, tachypnée transitoire, HTAP)
- Trouble métabolique (hypoglycémie)
- Hypothermie
- Ictère prolongé
- Troubles alimentaires
- Infection néonatale

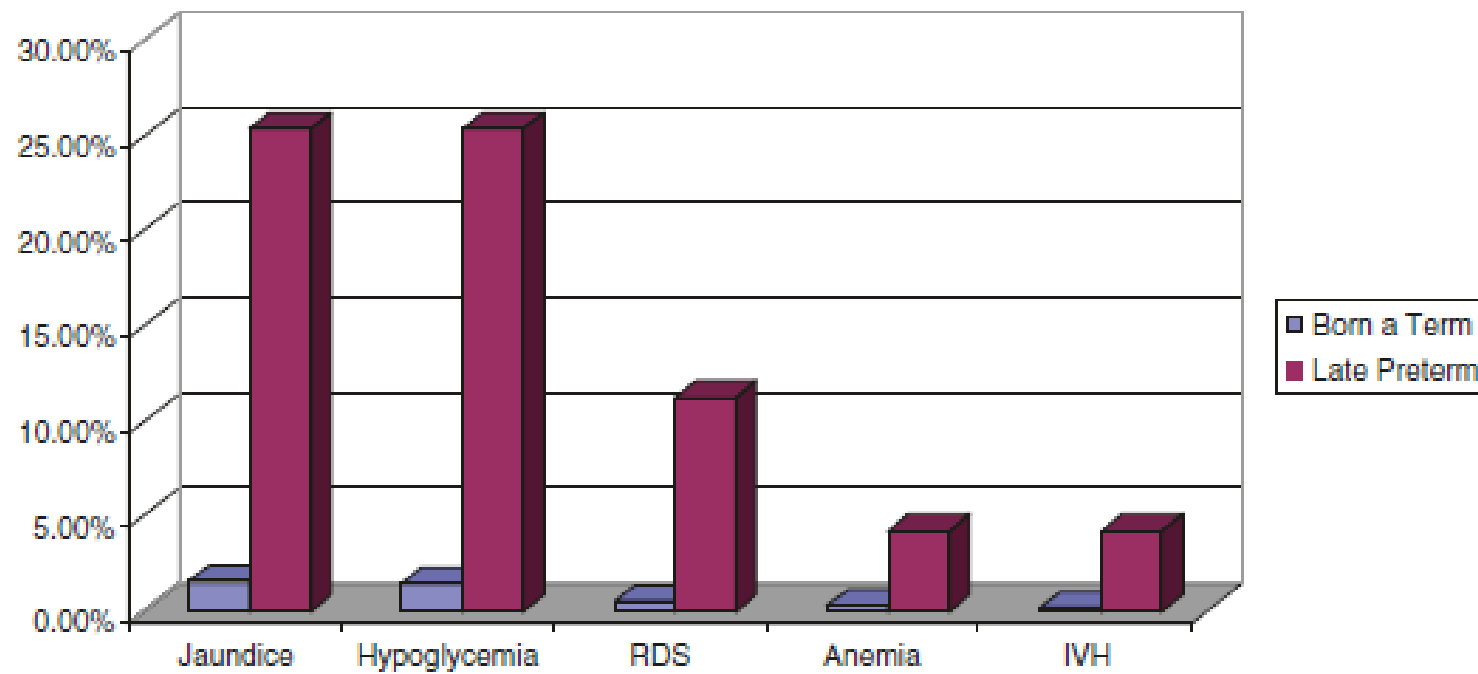
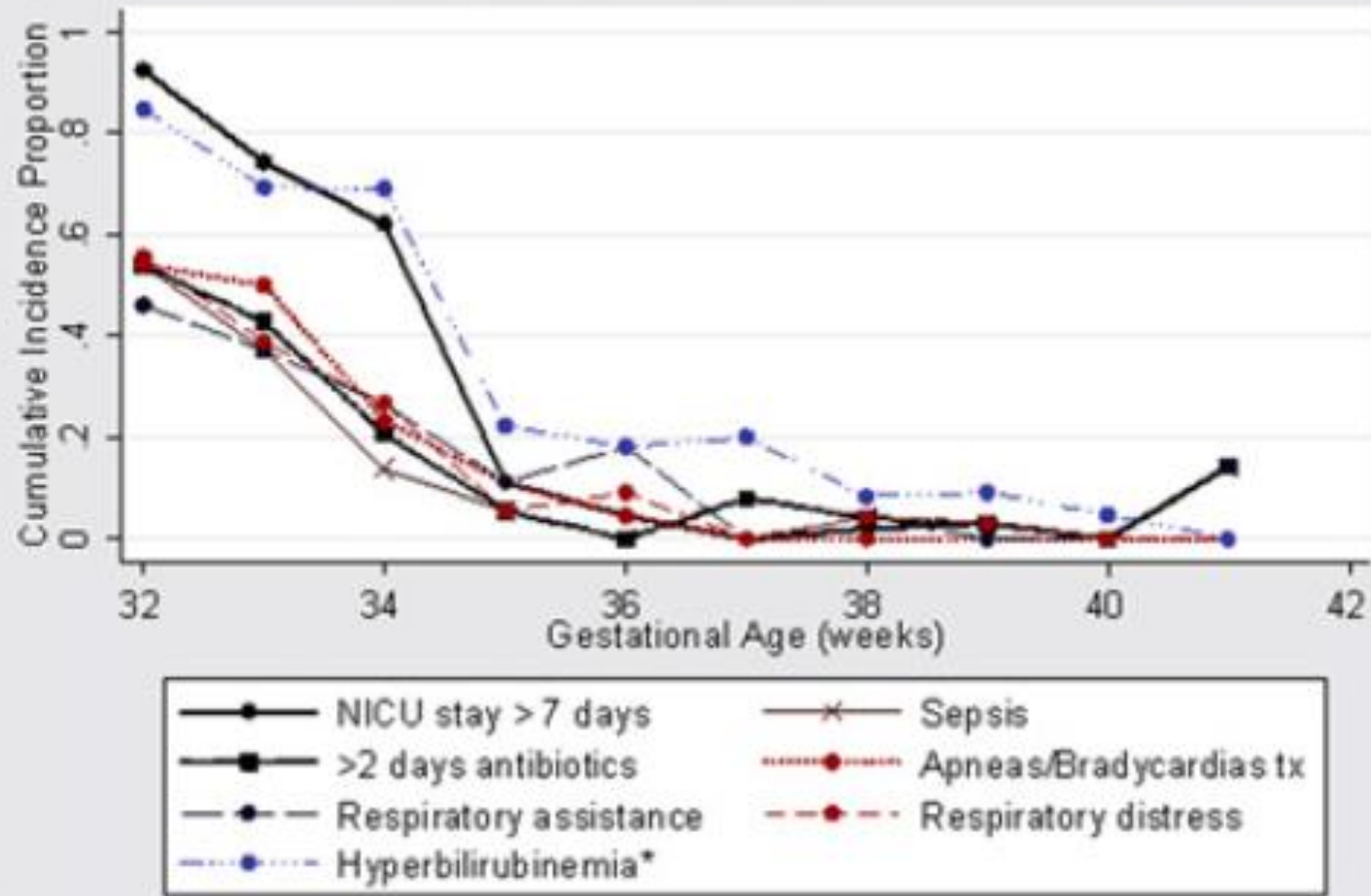


Figure 1 Adverse neonatal outcomes in term and late preterm infants analyzed. Data are expressed as percentages (%).

Select Adverse Neonatal Outcomes



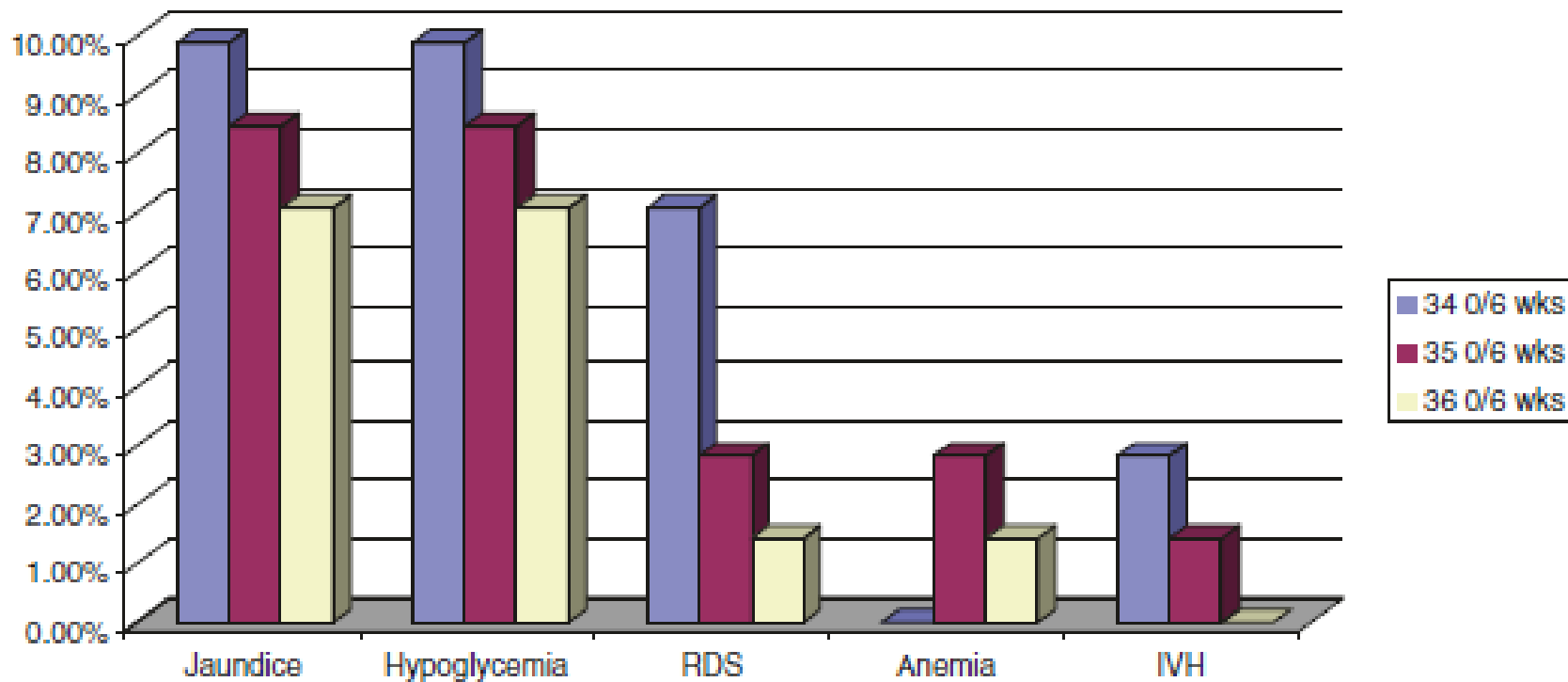


Figure 2 Adverse neonatal outcomes in the late preterm infants stratified for gestational age. Data are expressed as percentages (%).

TABLE 2 Late-Preterm Infants and the Most Frequent Complications of Prematurity During the Birth Hospitalization

Outcome During Initial Birth Hospitalization	Late-Preterm Morbidity		Term Morbidity		OR (95% CI)	P
	No.	%	No.	%		
<u>Feeding difficulties</u>						
Wang et al ² (35–36 ⁶ / ₇ wk)	29	32.2	7	7.4	—	—
<u>Hypoglycemia</u>						
Wang et al ² (35–36 ⁶ / ₇ wk)	14	15.6	5	5.3	3.30 (1.1–12.2)	.028
Jaundice						
Wang et al ² (35–36 ⁶ / ₇ wk)	49	54.4	36	37.9	1.95 (1.04–3.67)	.027
Temperature instability						
Wang et al ² (35–36 ⁶ / ₇ wk)	9	10.0	0	0.0	Infinite	.0012
Apnea						
Henderson-Smart ³⁸ (34–35 ⁶ / ₇ wk)	—	7.0	—	<0.1	—	—
Merchant et al ⁴² (35–36 ⁶ / ₇ wk)	6	12.0	0	0.0	12.0 (4.5–24.3)	.0267
Wang et al ² (35–36 ⁶ / ₇ wk)	4	4.0	0	0.0	—	.054
Respiratory distress						
Escobar et al ²⁴ (34–36 ⁶ / ₇ wk)	345	10.7	975	2.7	—	—
Gilbert et al ⁷⁰ (34–36 ⁶ / ₇ wk)	1167	3.6	843	0.8	—	—
Rubaltelli et al ³³ (34–36 ⁶ / ₇ wk)	314	9.6	359	0.6	—	—
Wang et al ² (35–36 ⁶ / ₇ wk)	26	28.9	4	4.2	9.14 (2.9–37.8)	.00001
Received intravenous infusion						
Wang et al ² (35–36 ⁶ / ₇ wk)	24	26.7	5	5.3	6.48 (2.3–22.9)	.0007
Underwent sepsis evaluation						
Wang et al ² (35–36 ⁶ / ₇ wk)	33	36.7	12	12.6	3.97 (1.8–9.2)	.00015
Received mechanical ventilation						
Gilbert et al ⁷⁰ (34–36 ⁶ / ₇ wk)	1103	3.4	950	0.9	—	—

OR indicates odds ratio; CI, confidence interval; —, data not reported.

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UNE IMMATURITÉ PHYSIOLOGIQUE

Morbidités tardives

- Mort inattendue du nourrisson (risque 1,37/1000 vs 0,69/1000)
- Soins médicaux
- Re-hospitalisation
- Troubles neurologiques

Marrocchela, 2014
Bastek, 2008
De Jong, 2012
Chyi, 2008

MORTALITÉ

Table 1 Neonatal and Infant Mortality Rates Associated With Late Preterm and Early-Term Deliveries

Gestational Age, Weeks	Neonatal Mortality		Infant Mortality	
	Rate	RR (95% CI)	Rate	RR (95% CI)
34	7.1	9.5 (8.4-10.8)	11.8	5.4 (4.9-5.9)
35	4.8	6.4 (5.6-7.2)	8.6	3.9 (3.6-4.3)
36	2.8	3.7 (3.3-4.2)	5.7	2.6 (2.4-2.8)
37	1.7	2.3 (2.1-2.6)	4.1	1.9 (1.8-2.0)
38	1.0	1.4 (1.3-1.5)	2.7	1.2 (1.2-1.3)
39	0.8	1.00 (reference)	2.2	1.00 (reference)
40	0.8	1.0 (0.9-1.1)	2.1	0.9 (0.9-1.0)

Adapted from Reddy et al.¹³

CI, confidence interval; RR, relative risk.

Etats-Unis, > 3 millions de naissances, 225 000 naissances « prématurées modérées »

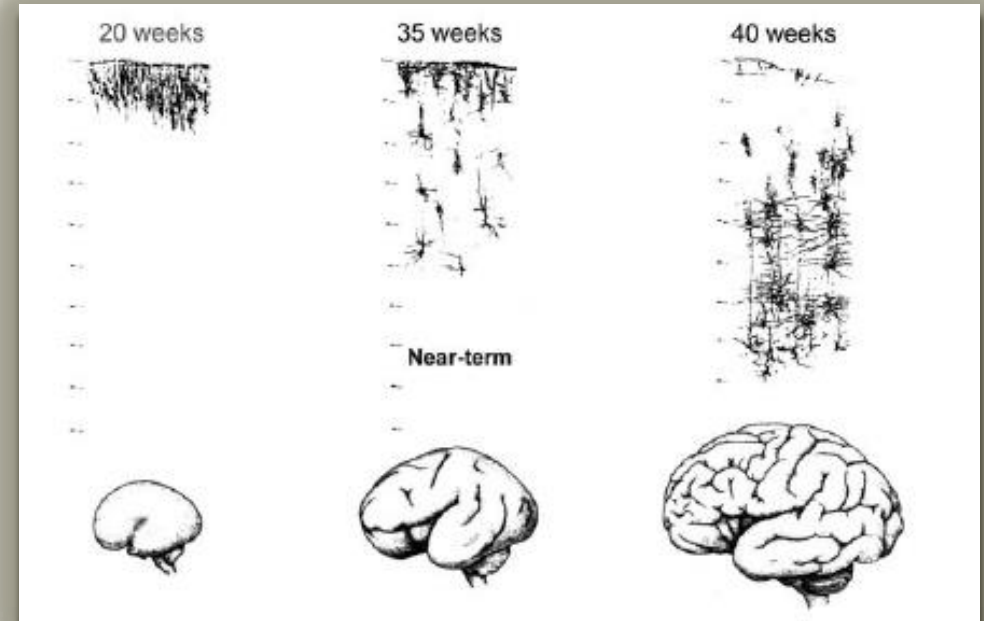
RISQUE NEUROLOGIQUE

Paralyse cérébrale x 3

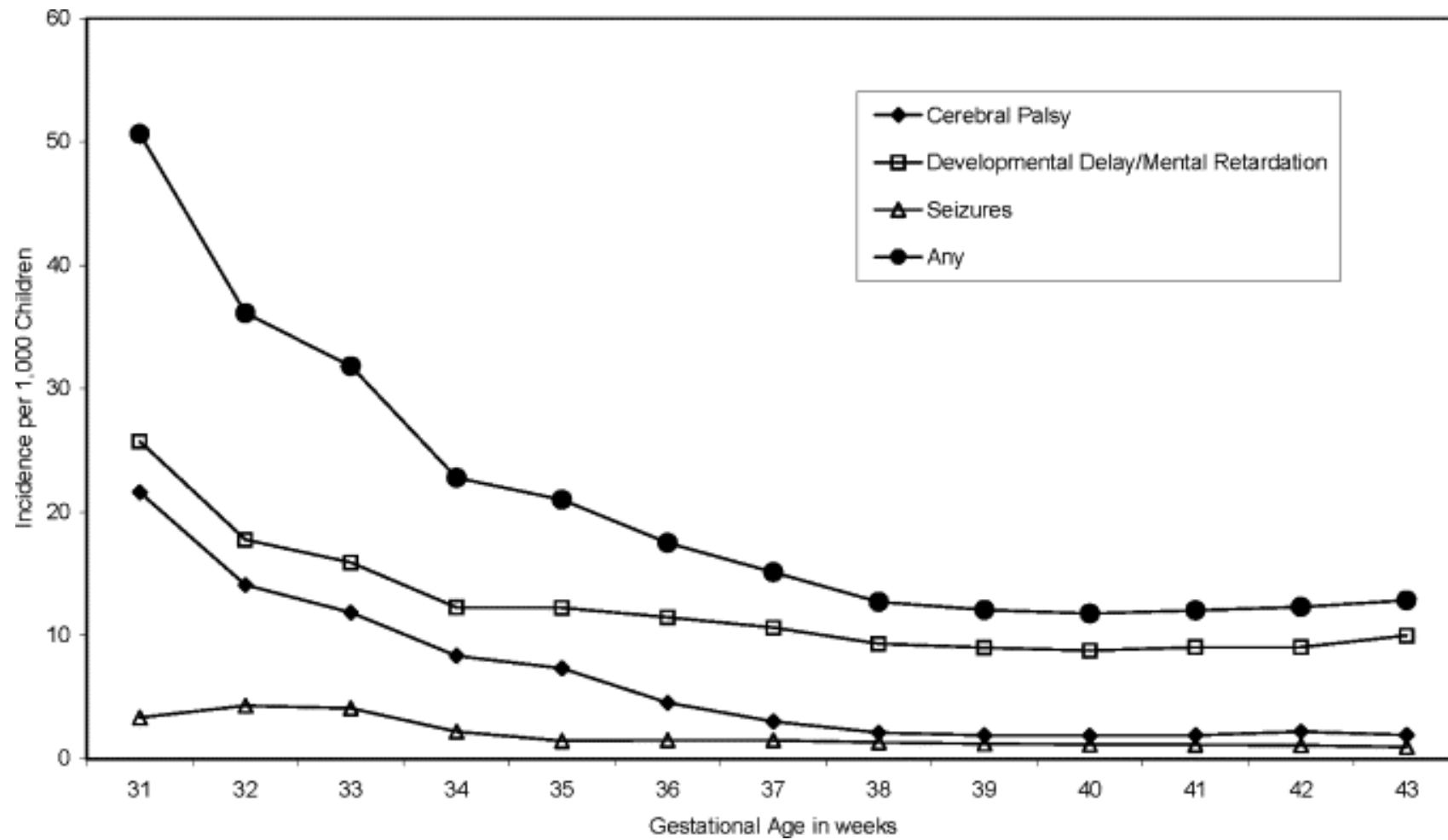
Retard mental x 1,25

Troubles du comportement

Éducation spécialisée x 1,3 à 2,8



Kinney, 2006
Morse, 2009
De Jong, 2012
Chyi, 2008
Nepomnyaschy, 2012



DEVENIR A 2 ANS

	VP	MLP	FT	Chi ² /F (df)
n	58	88	86	
Birth weight [g] M (SD)	1275 (498)	2179 (405)	3518 (454)	461.28 (2, 227)**
Gestational age [weeks] M (SD)	29.23 (2.3)	34.46 (1.2)	39.8 (1.1)	846.94 (2, 229)**
(Corrected) Age [months] M (SD)	24.8 (1.3)	24.6 (0.5)	24.6 (0.4)	1.84 (2, 228)
Sex [male] %	52	51	47	0.52 (2)
Length NICU stay [d] M (SD)	19 (20)	5 (2)	0 (0)	57.86 (2, 205)**
Length hospital stay [d] M (SD)	61 (24)	18 (10)	4 (2)	326.21 (2, 228)**
Mechanical ventilation [h] M (SD)	27.0 (78.8)	2.8 (10.2)	0 (0)	9.11 (2, 229)**
Cognitive development MDI	93.23 (15.69) 42-117	100.59 (11.30) 72-118	106.25 (8.94) 76-120	M (SD) Min-Max
Effortful control EC Composite Score	-0.47 (0.86)	-0.02 (0.79)	0.09 (0.71)	M (SD)
ECBQ inhibition	3.84 (0.99)	4.02 (0.85)	4.05 (0.85)	M (SD)
ECBQ Attention Shifting	4.65 (0.74)	4.56 (0.66)	4.60 (0.60)	M (SD)
ECBQ Attention Focusing	4.47 (0.97)	4.44 (0.87)	4.35 (0.98)	M (SD)

VP, very preterm group.
MLP, moderately to late preterm group.
FT, full-term group.
MDI, Mental Developmental Index.
EC, effortful control.
ECBQ, Early Child Behavior Questionnaire.

TROUBLES COGNITIFS

	QI < 85	QI < 70
26 SA	37%*	21%*
28 SA	37%*	21%*
32 SA	26%*	8%*
34-36 SA	20% **	
39-40 SA	12%*	3%*

* Données Epipage 1 à 5 ans

** Woythaler 2011 à 2 ans

APHM 2014-2015

	2014-2015
Naissance 34+0 à 36+6 SA	720
Non hospitalisés	194 (27%)
Hospitalisés	526 (73%)

NOUVEAU-NÉS NON HOSPITALISÉS

Durée de séjour en maternité en jours	2014-2015 N = 194
Moyenne [ET]	6 [3,8]
Médiane	5
Min- max	1-19

194 dont 13 à 34 SA
55 à 35 SA
126 à 35 SA

NOUVEAU-NÉS NON HOSPITALISÉS

	2014-2015 (n=194)
Appel pédiatre avant naissance	88 (45%)
Ventilation manuelle	1
Transfusion GRD	1
ETF	137
EEG	13
FO	1
Radiographie /échographie	21 / 8
Attelle	43
Kiné (pieds bots)	4

NOUVEAU-NÉS HOSPITALISÉS

	2014-2015
Naissance 34+0 à 36+6 SA	720
Non hospitalisés	194 (27%)
Hospitalisés	526 (73%)

Durée de séjour en jours	2014-2015
Moyenne	10,9
Min-max	2-62
Nombres de jours	5736

NOUVEAU-NES HOSPITALISES : DIAGNOSTICS

	2014-2015 (n=526)
Pathologie respiratoire	237 (45%)
Pathologie infectieuse	33 (6,2%)
Malformations/ Anomalies chromosomiques	48 (9,1%)

NOUVEAU-NES HOSPITALISES : ACTES

	2014-2015 (n=526)
Appel pédiatre avant naissance	126 (?)
Ventilation manuelle au masque	83
Intubation + surfactant	6
Intubation	8
CPAP	354 jours
Ventilation mécanique	72 jours
Oxygénothérapie	35 jours
Amines	34 jours
Nutrition entérale exclusive	1409 jours
Nutrition parentérale exclusive	399 jours
NE + NP	526 jours

NOUVEAU-NES HOSPITALISES : ACTES

	2014-2015 (n = 526)
Monitoring cardio-respiratoire	2258 jours
Nombre de cathéter central	32
Nombre de KTVO	9
Transfusion (EST)	20 (3)
ETF	264
EEG	243
Fond d'oeil	11
Echographie cardiaque	23

CONCLUSION

Une population importante en volume

Soins en période néonatale

Une vulnérabilité à reconnaître

Un suivi et prise en charge à long terme à réfléchir



