

# Where Do *Your Patients* Want to Be in 5 Years?

Help your patients improve their  
prognosis by achieving low-risk status<sup>1-4</sup>



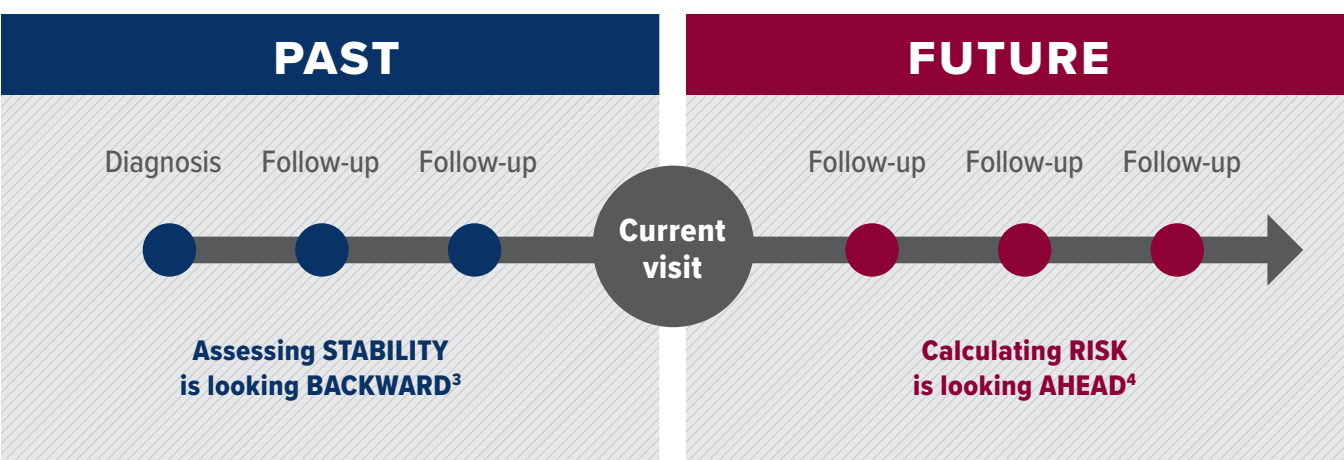
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# Formally Calculate Risk to Help Accurately Assess Your Patients<sup>4,5</sup>

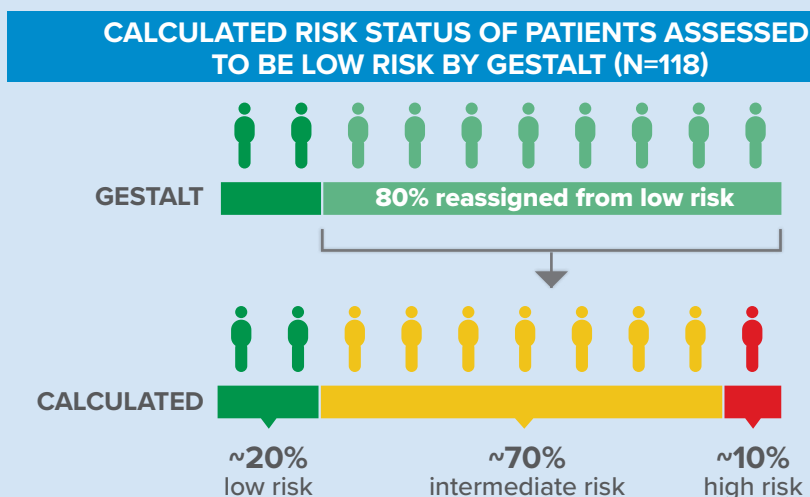
Know how your patients are doing today and how they will be doing in the future<sup>1-3</sup>

Calculate your patients' risk status today to estimate their 5-year prognosis<sup>1-3</sup>



2015 ESC/ERS guidelines recommend a multiparameter approach to risk assessment because no single variable provides sufficient prognostic information.<sup>4</sup>

In a study of 365 patients, where 118 were estimated to be low risk, **80% of these patients were reassigned to a higher risk category** after formal risk calculation<sup>6</sup>



# WSPH 2018 Recommends Comprehensive Risk Assessments Every 3 to 6 Months<sup>5</sup>

## Calculate Your Patients' Risk Status Using Only 3 Noninvasive Criteria<sup>1,4</sup>



### Functional Class

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Widely used as a measure of a patient's functional status<sup>4</sup>

**Low-risk goal<sup>4</sup>**  
Functional Class I/II



### 6-Minute Walk Distance

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Most predictive parameter of 5-year survival in 2 European registries<sup>1,3</sup>

**Low-risk goal<sup>4</sup>**  
>440 m



### NT-proBNP/BNP

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- Indicator of RV function in PAH<sup>7</sup>
- A normal NT-proBNP/BNP has a 98% sensitivity to exclude the presence of either RAP >8 mm Hg, CI <2.5 L/l/m<sup>2</sup>, or both<sup>1</sup>

**Low-risk goals<sup>4</sup>**

- NT-proBNP <300 ng/L
- BNP <50 ng/L

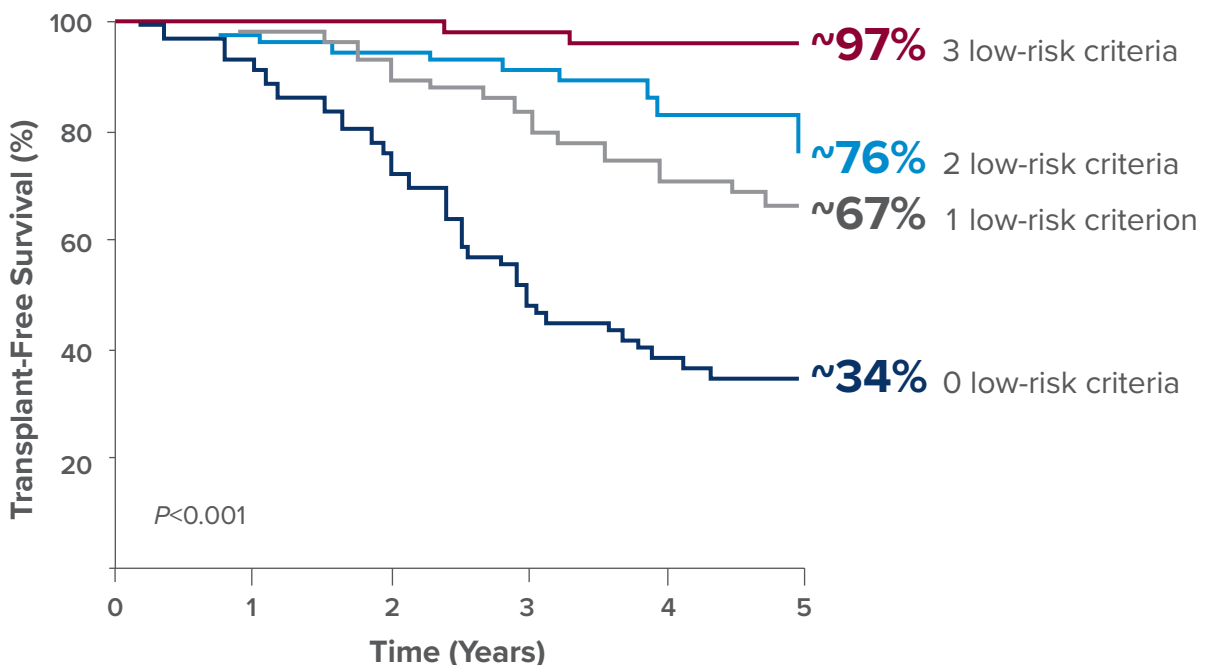
# Make Low Risk the Goal<sup>4,5</sup>

## Achieving more low-risk criteria can improve your patients' 5-year prognosis<sup>1</sup>

**The French PAH Registry\***: In an exploratory subanalysis, patients were assessed for 3 low-risk criteria; transplant-free survival was estimated based on number of low-risk criteria present at first follow-up (n=603).<sup>1</sup>

- **WHO/NYHA**: FC I/II
- **6MWD**: >440 m
- **NT-proBNP**: <300 ng/L  
or **BNP**: <50 ng/L

### Prognosis by number of noninvasive low-risk criteria at first follow-up<sup>1†</sup>



## Is it time to adjust your patients' treatment to help them reach low risk?<sup>5</sup>

\*Patients enrolled in the French PAH Registry had idiopathic, heritable, or drug-induced PAH. Of these patients, 603 had baseline and follow-up with WHO/NYHA FC, 6MWD, and NT-proBNP or BNP measurements documented within 1 year of diagnosis.<sup>1</sup>

<sup>†</sup>Median (IQR) follow-up, 4.4 (3.6-6.4) months.<sup>1</sup>

Patient's Name

Today's Date

# Today's Risk Assessment

Circle the values from today's assessment.

Low Risk

Intermediate Risk

High Risk



Functional Class

I, II

III

IV



6-Minute Walk Test

>440 m

165-440 m

<165 m



NT-proBNP/  
BNP

NT-proBNP  
<300 ng/L

NT-proBNP  
300-1400 ng/L

NT-proBNP  
>1400 ng/L

—  
BNP <50 ng/L

—  
BNP 50-300 ng/L

—  
BNP >300 ng/L

**How many low-risk goals has your patient met today?**

**What else can you do to help your patients meet more low-risk goals?**



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Your healthcare provider may use these 3 evaluations to perform a risk assessment to know if your treatment plan needs to be adjusted to help you feel better and do more.



## Functional Class

Shows how your symptoms impact your day-to-day activities

Functional Class is divided into 4 groups



### Class 1

Can you ride a bike or go for a long walk without getting breathless?



### Class 2

Do you need to pause to catch your breath when you climb stairs or go shopping?



### Class 3

Can you walk to the end of your driveway without stopping to rest?



### Class 4

Do you experience symptoms of PAH even when resting?



## 6-Minute Walk Test

Evaluates how far you can walk in 6 minutes



## NT-proBNP or BNP

Measures a chemical in your blood that shows how much strain is on your heart

**People who are able to achieve more low-risk goals sooner have a higher survival rate\***

**Ask your healthcare provider how you can achieve more low-risk goals**

\*Survival=living without lung transplant.

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# Is it time to adjust your patients' treatment to help them reach low risk?

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6MWD=6-minute walk distance; BNP=B-type natriuretic peptide; CI=cardiac index; ESC/ERS=European Society of Cardiology/European Respiratory Society; FC=Functional Class; NT-proBNP=N-terminal pro-B-type natriuretic peptide; NYHA=New York Heart Association; PAH=pulmonary arterial hypertension; RAP=right atrial pressure; RHC=right heart catheterization; RV=right ventricle; WHO=World Health Organization; WSPH=World Symposium on Pulmonary Hypertension.

**References:** **1.** Boucly A, et al. *Eur Respir J.* 2017;50:1700889. **2.** Kylhammar D, et al. *Eur Heart J.* 2018;39(47):4175-4181. **3.** Hoeper MM, et al. *Eur Respir J.* 2017;50:1700740. **4.** Galie N, et al. *Eur Heart J.* 2016;37(1):67-119. **5.** Galie N, et al. *Eur Resp J.* 2019;53(1):1801889. **6.** Simons JE, et al. *Adv Ther.* 2019;36(9):2351-2363. **7.** Warwick G, et al. *Eur Resp J.* 2008;32:503-512.

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